UNIVERSITY OF NAIROBI

USING MEDIATION TO RESOLVE DEVELOPMENT PROJECT CONFLICTS: A CASE OF OLKARIA IV GEOTHERMAL PROJECT, KENYA

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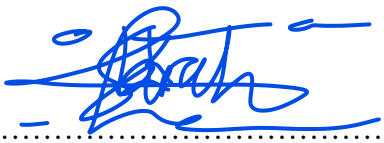
DECLARATION

This thesis is my original work and has not been submitted for the award of a degree in any other University.



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DEDICATION

I dedicate this work to individuals and institutions working inexorably to resolve amicably emerging socio-economic and environmental conflicts for the benefit of the intra and intergenerational equity.

This thesis is also dedicated to my late mother and father, Ms. Esther Masicha and Mr. Josiah K. Kong'ani. While they have long been gone, I have special gratitude for they laid the great foundation in my life. I am deeply indebted to mom for the great values she imparted in me. She was a prayer warrior, a value that continues to impact positively in my daily endeavors. It is unfortunate that none of them lived to celebrate the fruits of their labour. May their souls rest in eternal peace!

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LIST OF ACRONYS AND ABBREVIATIONS

ADR:	Alternative Dispute Resolution
BATNA:	Best Alternative to a Negotiated Agreement
CCS:	Carbon Capture Storage
CCGT:	Combined Cycle Gas Turbine
CFA:	Community Forest Association
CoK:	The Constitution of Kenya
$CO_{2:}$	Carbon dioxide
EARS:	East Africa Rift System
EJAtlas:	The Global Environmental Justice Atlas
ESIA:	Environmental and Social Impact Assessment
EIB:	European Investment Bank
EIB-CM:	European Investment Bank Complaints Mechanism
EWLA:	Ethiopian Women Lawyers Association
FGDs:	Focus Group Discussions
GPS:	Global Positioning System
GRS:	Grievance Redress Service
GWe:	Gigawatt Electrical
Ha:	Hectares
HGNP:	Hell's Gate National Park
IBA:	Important Bird Area
KEEP:	Kenya Electricity Expansion Project

KenGen:	Kenya Electricity Generating Company
KIIs:	Key Informant Interviews
KKPA:	Primary Cooperative Credit for Members scheme
KPLC:	Kenya Power and Lighting Company
MASL:	Meters above Sea Level
MoEF:	Ministry of Environment and Forestry
MoU:	Memorandum of Understanding
MW:	Megawatts
NGOs:	Non-Governmental Organizations
NRPAPs:	Non-Resettled Project Affected Persons
NPA:	National Park Authority
NTFPs:	Non-Timber Forest Products
PAPS:	Project Affected Persons
RAPIC:	Resettlement Action Plan Implementation Committee
RFPD:	Research Facilitated Professional Development
SD:	Sustainable Development
SDGs:	Sustainable Development Goals
Sq. Km:	Square Kilometer
TDR:	Traditional Dispute Resolution
UNDP:	United Nations Development Programme
WB:	World Bank

ABSTRACT

Geothermal power development promotes the availability and reliance on green energy sources across the globe, increasing environmental sustainability through climate change mitigation. Geothermal development in Olkaria field is part of Kenya's efforts to transition to middle income and newly industrialized State by 2030. However, the projects' installations are an example of developmental undertakings instigating conflicts with the local community over their relocation and compensation concerns. These conflicts escalate without proper management, yet their dynamics remain poorly understood. Numerous studies have confirmed the application of mediation in managing conflicts over natural resources, but the effectiveness of this strategy in Kenya has not been well established. Also, most of these studies are limited to qualitative research, with little review of mediation processes to enhance their use and efficacy. This study sought to assess the role of mediation in resolving conflicts that emanated from the implementation of Olkaria IV geothermal project. Specifically, the study evaluated the dynamics of conflict escalation, documented the process of the Olkaria IV mediation and appraised its role, challenges and lessons in managing the conflicts. Quantitative and qualitative data were collected through household survey, focus groups and key informant interviews. The study also utilized archival data. Quantitative data was analyzed using descriptive statistics, while NVivo software was used to code and analyze qualitative accounts through deductive and inductive approaches. The study results reveal that the Olkaria IV project conflict was manifested through socio-economic (51%), environmental (21%), cultural (14%) and political (14%) dimensions. The PAPs discontent was triggered by the inadequate information and participation in the decision-making process on project design, the PAPs' relocation and compensation. Conflict

effects on PAPs were ominous and managed through competition, where PAPs were pressured to pacts (31%), and avoidance, where they involuntarily conformed (27%). Subsequent dissatisfaction among the PAPs resulted in unrest that almost disrupted the project, prompting mediation. Mediation neutralized conflicts between KenGen and the PAPs, improved relationships between the parties, and improved PAPs' livelihoods through opportunities within Olkaria IV project and the RAPland. Use of a consultative process within the larger community in selection of community representatives, as a best practice, could have promoted acceptability of the mediation results. Further, the mediators' expertise, good listening and probing skills resulted in successful negotiations. However, there is room for improvement including smoother management of procedural issues, building capacity of inadequate PAPs' and attitude management for easier contribution and practice in the mediation, and shorter mediation period to avoid protraction and distrust. The project planners need to include community participation in design of large development projects to secure community buy-in, remove unrealistic pledges/expectations and oil implementation. There is a need for adequate pre-mediation capacity building among community representatives. A strategy for comprehensive feedback and reporting mechanism with the community; should be created. Continuous documentation and evaluation of the mediation process would help construction of best practices for future application. Finally, there is a need to formulate policies for out-scaling the use of mediation as alternative dispute resolution mechanisms in implementation of developmental projects in the country.

Keywords: conflicts, geothermal project implementation, Kenya, mediation, project affected persons, relocation.

CHAPTER ONE: INTRODUCTION

1.1 Profile of the thesis

This thesis presents a case for use of mediation in resolving conflicts arising from implementation of large development projects that disrupt social and economic lives of communities. It uses the case of the geothermal energy generation project at Olkaria, Naivasha Kenya. The thesis is based on paper format, and is organized into seven chapters. Chapter One presents the general background, statement of the research problem, objectives and questions, justification, and ends with the limitations. Chapter Two covers the literature review, research gaps, theoretical and conceptual frameworks. Chapter Three presents the general methods and materials. Chapters Four, Five, and Six present articles already published in peer reviewed scientific journals based on the results of the three study objectives. The article in chapter four is titled, 'variety and management of developmental conflicts, the case of Olkaria IV geothermal project, Kenya,' published in the Journal of Conflict, Security & Development. The article in chapter five is titled, 'managing geothermal project implementation conflicts through mediation: a case of Olkaria IV project, Nakuru county, Kenya,' published in the Journal of Sustainability, Environment and Peace. Chapter six presents an article captioned, 'mediating energy project implementation conflicts, a learning curve, the case of Olkaria IV geothermal, Kenya,' published in the Journal of Conflict Management and Sustainable Development. Chapter Seven is a synthesis of the whole thesis presenting an explanation and discussions of the general results, and ends with conclusion and recommendations.

1.2 Background

The demand for countries to meet their diverse economic needs and attain sustainable development and other global commitments is increasingly inevitable. As a result, major development projects such as the exploration of clean energy, including geothermal (Karytsas *et al.,* 2019), road infrastructural development (Khanani *et al.,* 2020), dams, and agricultural-related projects, among others (Kirchherr *et al.,* 2019; Mosley & Watson, 2016; Schilling *et al.,* 2016) have been undertaken in different parts of the world. As clearly pointed out by Hughes & Rogei (2020) and Vanclay (2017), these large-scale infrastructure projects have become more invasive of indigenous and marginalized communities' lands and other natural resources.

These lands, including those in the arid and semi-arid areas (ASALs) that might seem unproductive continue to attract the attention from governments, developers, among other actors, due to their untapped value, and importance, resulting in potential conflicts with the local community.

The Global Environmental Justice Atlas (Temper *et al.,* 2018) suggests an existence of about 2520 socio-environmental conflicts between large projects and communities worldwide, although this data might be incomprehensive given the mushrooming infrastructure across the globe. However, Temper *et al.,* (2018) observes that over 345 of these conflicts are related to the development of renewable energy amenities. Whereas these projects remain fundamental to the nations' development, it's evident that their establishment often triggers conflicts with the local community. This is especially where they result in the residents' forced relocation, disruption of their livelihood sources, perceived unfair compensation and health effects (Wu *et al.,* 2017). In this regard, the discontented communities will continue to oppose or problematize such

developments.

In Spain, for instance, the development of an 800 MW combined cycle gas turbine (CCGT) power plant in Boroa, which aimed at converting Basque Country into self-reliant in the production of energy by 2010, triggered conflicts with the local community, following concerns over their quality of life and health (Baigorrotegui, 2015). Although the plant was completed and inaugurated in 2005, the process was characterized with protracted protests from the community delaying its installations: a clear demonstration of implication of unresolved community concerns. This was also repeated in the case of Vattenfall project at Beeskow in Germany, on the exploration of suitability of Beeskow area for storage of carbon dioxide (CO_2) in 2012, which resulted in its cancellation. The project encountered challenges in building trust among the local community over the storage's potential risks, including leakages with possible fatal accidents and groundwater contamination among others (Dütschke, 2011; Oltra *et al.,* 2012).

In Asia, Indonesian government was compelled to increase plantation land to reach nine million hectares (Ha) by 2016 (Obidzinski & Chaudhury, 2009) to meet the rising demands for palm oil and timber at the local and national levels. This was part of efforts to double crude oil production by 2020 to about 40 million tons, that would have seen an increase in land under plantations (Gingold, 2010; Rokhim *et al.,* 2020). While this increase was earmarked to contribute significantly to the country's economic development, conflicts were inevitably triggered by the nature of their scale (Gritten & Mola-Yudego, 2010; Mola-Yudego & Gritten, 2010; Obidzinski et al., 2012). In the year 2010 occurrence alone, slightly more than 600 conflicts between the local communities and the plantation companies were reported (Dhiaulhaq *et al.,* 2014; Rokhim *et al.,* 2020), demonstrating a need for effective management strategies and

application of lessons learnt to avert the raise in conflict cases.

Oil extractions in Nigeria are economically viable activities. The Shell Petroleum Development Company and the National Petroleum Corporation have over the years raised billions of dollars from oil extracted in Ogoni people's land in Niger Delta (Boele *et al.,* 2001; Oseremen, 2016). However, the extensive oil contamination remains one of the key triggers of social instability and conflicts in Nigeria (Kron & Jensen, 2016). Severe environmental degradation incidences including air pollution-related to oil industry operations pose potential negative effects on the health of the local people across the Delta region, a major source of conflict on environmental alteration (Boele, 1995; Boele *et al.,* 2001). In addition, the extraction has been associated with destruction of community's livelihoods, prompting further escalating conflict with disastrous consequences like militarization of the local community and loss of thousand lives, including one of Africa's major environmental activists, Saro-Wiwa.

In Kenya, the development of oil and wind projects in Turkana County has not been immune to conflicts with the local communities. In these cases, the operating companies were accused of failing to actualize the pledges regarding land compensation and employment prospects (Schilling *et al.,* 2015; Schilling *et al.,* 2018). Also, whereas the community was unhappy with the benefit-sharing proposed by the Mui Basin coal exploration project in Kitui, Kenya, the National Government was blamed for secretly awarding the tender to the investor in 2011, which delayed its execution (Neumann, 2015; Omondi *et al.,* 2020).

Geothermal resources are geologically controlled, thus limited to specific locations. In Kenya, these resources are located within the Kenyan Rift Valley which, forms part of the East Africa Rift System (EARS), (Mangi, 2018). Kenya leads in Africa in terms of geothermal power

production, with the potential of up to 10,000 megawatts (MW) spread over fourteen sites (EPRA, 2020, 2021). Kenya is also one of the fastest growing geothermal power producers in the world, currently ranked 8th globally (ThinkGeoEnergy, 2021; UNESCO, 2021).

The geothermal energy exploration in Kenya is anticipated to assist the country's transition into a newly industrialized, middle-income State by 2030, and provide a high quality of life to all its citizens in a clean and secure environment (The Energy Act, 2019). The tapping of geothermal resources exhibits the State's efforts towards realizing global commitments, including the Sustainable Development Goals (SDG) 7 on affordable, reliable, sustainable, modern energy for all, and SGD 13 which is climate actions (The Energy Act, 2019).

However, developing the geothermal industry in the Great Rift Valley has been not been easily accepted by the local communities resulting in conflicts. These conflicts have been attributed to demand for land and disruption of livelihood of the marginalized communities, their relocation, and political and local ethnic dynamics (Shiloh, 2015). Yet, the dynamics of such natural resource conflicts remain poorly understood (Unruh *et al.,* 2019) and improperly managed. This is true especially with regard to analysis of mediated efforts.

Conflicts in developmental projects are inevitable. These projects bring together different players such as the State, the developer and the community who express diversity, often with conflicting needs and concerns (Wei *et al.,* 2016). Conflicts, arise primarily as a result of lack of consultation and marginalization of communities, local people's displacement, restriction of access, and disruption of the residents' livelihoods and income streams, among others (Kron & Jensen, 2016; Cheung, 2010; Dhiaulhaq *et al.,* 2014; Patel *et al.,* 2013; Yurdi *et al.,* 2010).

Conflicts have the potential to cripple a nation's economy, especially in fragile countries like Kenya, which is already encouraged by the weak governance system, with a high occurrence of political and ethnic tensions and worsened by corruption (Brown & Keating, 2015), climate change and global pandemics among other issues. Conflicts could adversely slow developmental projects, increase their costs, result into their rejection, termination and loss of lives (Batel *et al.,* 2013; Jobert *et al.,* 2007; Karytsas *et al.,* 2019; Wei *et al.,* 2016), especially where there is no mutually agreed dispute resolution process (African Union, 2019).

Mediation is a conflict resolution strategy, where parties volunteer to confidentially negotiate their conflict under supervision/facilitation of an impartial third-party (Bush & Folger, 2005; Dhiaulhaq *et al.,* 2014; Vindeløv, 2012; Wall & Lynn, 1993). The third party (or mediator) has no authority in making the decision for the conflicting parties. The mediator only helps the parties to reach a mutually acceptable settlement through a structured process (Bush & Folger, 2005; Wall & Lynn, 1993). Mediation has been deemed as an effective style for managing natural resource based conflicts (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015; Muigua, 2016; Rokhim *et al.,* 2020; Yurdi *et al.,* 2010). Mediation's use has increased across the globe (Kron & Jensen, 2016; Cheung, 2010), yet its application remains rather low in Kenya (Muigua, 2018; Muigua 2016).

Whereas, there is a growth in scholarly work on mediation processes and its effective application in resolution of natural resource conflicts, these publications are mainly from South Asia (Dhiaulhaq *et al.,* 2018; Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015; Rokhim *et al.,* 2020; Yurdi *et al.,* 2010). The available information, (Juma, 2009; Muigua, 2016; Muigua, 2017; Ambole *et al.,* 2019) is insufficiently comprehensive on the mediation processes and their role in

resolving developmental conflicts. Yet, mediation processes differ from one incident to another, depending on the nature, location and culture of conflicts (Bercovitch & Sigmund, 2006; Dhiaulhaq *et al.,* 2015), thus requiring site specific studies.

1.3 Statement of the Research Problem

Development is a non-negotiable agenda across the globe. Thus, accelerated investment in large-scale projects to meet not only economic needs and human development, but also enhance environmental sustainability and address pressing global concerns such as climate change. This has resulted in unprecedented exploration of clean energy worldwide (Karytsas *et al.,* 2019; Pan *et al.,* 2019), as countries including Kenya focus on global commitments inter lia, Sustainable Development Goals (SDGs) goal 7, on affordable, reliable, sustainable, modern energy for all, and number thirteen (13) on climate actions (The Energy Act, 2019) and the Paris Agreement.

However, the establishment of the important infrastructure like the geothermal energy plants, wind and oil projects continue to trigger conflicts with the local communities over their impacts, including relocation and compensation (Schade, 2017; Schilling *et al.,* 2015; Schilling *et al.,* 2018) which continue to escalate without their proper management. Yet the dynamics of these conflicts remain poorly understood (Murillo-Sandoval *et al.,* 2021; Unruh *et al.,* 2019).

Application of mediation has been noted as one of the most effective styles in managing such conflicts (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015; Muigua, 2016; Rokhim *et al.,* 2020; Yurdi *et al.,* 2010). Mediation has been deemed effective because of its long-lasting solutions parties agree on based on mutual consensus and with no coercion. In addition, mediation has been heralded because of its ability to help antagonistic parties to restore, redefine and transform their interactions and attitudes towards each other with the ultimate goal of

reconciliation and enhancing peaceful relationships (Moore, 2014). Mediation's relevance in resolving conflicts is enshrined and recognized in Kenya's Constitution, 2010, Article 159. This article directs the Courts to promote alternative dispute resolution mechanisms, including mediation, to address case backlog and accelerate access to justice.

However, mediation of conflicts in natural resources and development remains low in the country (Muigua, 2016) with scanty academic work on its processes, role, challenges and lessons. While the success of mediation has been recorded in many countries, including Ghana, Nigeria, Ethiopia (Uwazie, 2011), and largely in Indonesia (Bourdier, 2019; Dhiaulhaq *et al.*, 2018; Dhiaulhaq *et al.*, 2015; Samsudin & Pirard, 2014), the results in these countries may not apply to Kenya. The circumstances, dynamics of conflicts, mediation processes, and the results vary in each incident (Dhiaulhaq *et al.*, 2014); thus, the need for site-specific assessment.

The study sought to develop a better comprehension of conflicts that arose from the implementation of Olkaria IV geothermal project, and to document the mediation process and assess mediation's role in resolving these conflicts. The study sought to answer the following objectives and questions:

1.4 General objective

To assess the case of Olkaria IV geothermal project to evaluate peaceful and sustainable large projects through the use of mediation for resolving arising implementation conflicts.

1.4.1 Specific objectives

i. To evaluate the dynamics of conflicts that arose from the implementation of Olkaria IV geothermal project.

ii. To document the mediation process and appraise its role in resolving conflicts that emanated from the implementation of Olkaria IV geothermal project.

iii. To evaluate challenges and lessons of mediation in resolving conflicts that arose from the implementation of Olkaria IV geothermal project.

1.5 Research questions

i. What are the dynamics of conflicts arising from the implementation of developmental projects?

ii. What is the process and the role of mediation in managing developmental project implementation conflicts?

iii. What are the challenges and lessons of mediation in resolving conflicts arising from the implementation of developmental projects?

1.6 Justification

There are growing petitions to increase availability and reliance on green energy sources to enhance environmental sustainability and address climate change apprehensions worldwide. This has contributed to massive investment in the exploration of clean energy globally (Karytsas *et al.*, 2019; Pan *et al.,* 2019). The demand for electricity in East Africa is projected to quadruple by 2033, with preference hinging around geothermal, hydropower and wind due to their eco-friendliness.

Kenya is a leader in Africa in terms of geothermal power production, with a potential of up to 10,000 MW spread over fourteen sites (EPRA, 2020, 2021). The production of 944 MW electric power by 2022 has pushed the country's global ranking to position eight

(ThinkGeoEnergy, 2021; UNESCO, 2021). Kenya has the intent to generate up to 5000 MW from geothermal resources by 2030. The resources are located within the high tectonic activity areas of the Kenyan Rift Valley (Mangi, 2018).

Geothermal energy exploration is in line with the country's Vision 2030, of transiting to a newly industrialized, middle-income State, and provide a high quality of life to all its citizens in a clean and secure environment (The Energy Act, 2019). This also reveals the country's global commitment towards the SDGs (Seven and 13), which are paramount to achievement of other SDGs including number One on ending poverty in all forms, number Two on eliminating hunger and number Three on improving health and wellbeing (Ouedraogo, 2019).

However, geothermal energy development including at Olkaria IV, elicited conflicts between KenGen and the local communities over their relocation and perceived unfair compensations (Schade, 2017). The conflicts persisted beyond the project's completion. Often, such conflicts would escalate with improper resolution, with the potential to increase project costs, and or deter its implementation towards the intended developmental goals (Oni-Ojo & Roland-Otaru, 2013). Thus, infrastructure related conflicts require robust conflict resolution mechanisms if development and envisioned purposes have to be attained.

Numerous studies have maintained that mediation is an effective strategy that manages conflicts, particularly over natural resources (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015; Muigua, 2016; Rokhim *et al.*, 2020; Yurdi *et al.*, 2010). The use of mediation has also become popular worldwide (Amanda & Jensen, 2016; Cheung, 2010; Moore, 2014). Its accomplishment has been recorded in numerous countries, including Ghana, Nigeria and Ethiopia, and Indonesia (Dhiaulhaq *et al.,* 2018; Uwazie, 2011). Use of mediation has facilitated the reduction of case

backlogs in courts and expedited justice in these countries. Therefore, the study focused on Olkaria IV geothermal project whose conflicts were managed successfully through mediation to evaluate the conflict dynamics, document the mediation process, and appraise its role, challenges and lessons for application in the implementation of larger projects with multifaceted conflicts beyond Kenya.

1.7 Scope and Limitations

The study sought to generate pertinent information on conflicts arising from the implementation of developmental projects, and use of mediation for resolving the conflicts for peaceful and amicable execution of large projects in the country. The information was gained through the collection of primary data, mainly via qualitative and quantitative research. The semi-structured questionnaire was administered to the PAPs' household heads, and in their absence to family members aged 18 years and above, three focus group discussions (elders, women, and the youth), eight key informant interviews, and participant observations. Data collection also included the review of global, regional, national and local literature on natural resource conflicts and conflict resolution. The study was restricted on Olkaria IV geothermal project in Naivasha Sub-County, Nakuru County, where mediation was applied successfully to resolve the conflicts between KenGen and the residents between May 2015 and June 2016.

Also, like any other study conducted in a marginalized area (Schilling *et al.*, 2018), the PAPs had previously been visited by other researchers who reportedly provided some households with a small token/a basket of goods. Thus, the community members anticipated some token of appreciation in return for their participation in the study. However, the PAPs

were informed that their participation would help to inform a deep understanding of the relocation conflicts and their resolution. This would facilitate application elsewhere, where a community has to be relocated to make room for essential developments including the proposed Olkaria V and VI and elsewhere for the nation's benefit.

CHAPTER TWO: LITERATURE REVIEW

This section encompasses a desk review of the global, regional, national and local published and unpublished literature on development of large scale infrastructure and conflicts, and conflict resolution. The chapter ends with research gaps and the theoretical and conceptual frameworks.

2.1 Conflicts

Conflicts are inevitable where people interact including in developmental projects. Conflict is a disagreement between two or more parties with diverging views or interests regarding an issue at hand. Other scholars have given varied but related definitions of conflict based on different standpoints. Thomas (1992) defines conflict as a process that begins when one party recognizes that the other has frustrated, or is about to frustrate, some concern or benefit. James & Callister (1995) defined conflict as a process during which a party feels that their concerns are frustrated or opposed by the other. Afzalur (2000) on the other hand, underscores that self-awareness and behaviour consciousness emerge while rational behaviour comes into being whenever there is a conflict. Wang *et al.* (2012) defines a conflict as a state, such as unpleasant phenomena of aggressive act, or a state of hostility in cognition or emotion.

In respect to traditional understanding of a conflict, Jehn (1995) states that a conflict emphasizes objective opposition in competitive situations, with the assumption that a conflict arises from opposite benefit relationship. This includes the allocation of resources and objectives inconsistency, and the perception that achievement of someone's objective may be

at the expense of the other. Other scholars, (Olanrewaju *et al.,* 2020; Otite & Albert, 1999) explains a conflict as, “a struggle over values and claims to scarce status, power and resources in which the aims of the opponents are to neutralize, injure or eliminate their rivals.

Whether violent or non-violent, conflicts have been experienced in societies, cultures, and even religions (Madalina, 2016) since time immemorial. Conflicts in developmental projects may emerge at every stage of the project cycle. Such projects bring together different actors like the private developer, the community and the State, with conflicting needs and concerns as also observed by (Wei *et al.,* 2016). Also, conflicts arise due to disagreements, including discontentment by the involved parties over perceived little consultation, marginalization of communities and forced relocation, and disruption of the residents' livelihood sources (Kron & Jensen, 2016; Dhiaulhaq *et al.,* 2014; Yurdi *et al.,* 2010). Notably, conflict occurrence could also be occasioned by factors such as different comprehension of the project plan, finiteness of resources as well the parties’ priorities (Liu & Low, 2011; Wu *et al.,* 2018).

While a conflict has adverse implications, it can be argued that conflict itself is better seen as value-neutral (Sanson & Bretherton, 2007). The positive or negative outcome of conflicts is dependent on how the conflict is handled. As clearly noted by Vestergaard *et al.,* (2011), conflict brings about suspicion and distrust, discourage cooperation, hurt relationships, and increase differences in positions held by different parties. This results in heightened tension between people leading to aggression, hostility and war.

Conflicts could cause havoc with unimaginable effects such as economic turmoil. This is particularly in countries like Kenya, which are already fighting global and local issues

including climate change and pandemics. However, conflicts could also cultivate good relations and promote development in a given region, if constructively managed as also observed by Brown & Keating (2015) and Vestergaard *et al.* (2011). Conflict escalation could bring about change in terms of growth, maturity, social, creative thinking, and novel experiences (Vestergaard *et al.,* 2011) that could ignite development.

Conflicts can uncover hidden issues for investigation, resulting in better clarity and improving the manner in which the problem is resolved. More so, conflicts can inspire more spontaneous and open communication leading to exposure of hidden pressures or displeasure, encourage resolution of issues, and improve stakeholders' understanding of a development's goals and purposes as also recorded in (Sanson & Bretherton, 2007; Vestergaard *et al.,* 2011).

2.2 Dynamics of project implementation conflicts

The 21st Century comes with advanced technology with increased industrial production and consumption. In this light, large infrastructure projects have been undertaken to match the heightened demand for socio-economic development worldwide. Also, these projects are implemented to meet the local and global commitments inter lia, Africa Agenda 2063, sustainable development goals and the Paris Agreement which also aims at enhancing environmental sustainability.

Proceeds tapped from successfully implemented projects are fundamental to economic growth of a given a country. Importantly, Unruh *et al.* (2019) rightly points out that such profits can minimize dependence on foreign aid by the developing countries and provide stable revenue sources and employment. However, project performance is often

influenced by myriad issues. Osei-Kyei *et al.* (2017) and Wu *et al.* (2018) aptly states that the projects' success is enabled factors. These include, effective management of risks, meeting the intended output, reliable and quality service operations, adherence to schedule and long-term relationship and partnership and profitability among others.

However, the implementation of large-scale infrastructure is hardly unnoticed. As observed by Wu *et al.* (2017), such infrastructures including climate fixes and dams like the Grand Ethiopian Renaissance often attract significant attention of the community and the general public due to their possible adverse impacts on environment, society and the economy. Often, these projects bring about conflicts, especially where their implementation results in discontentment of the residents over relocation, disruption of their livelihood sources, perceived unfair compensation and health effects.

Although the Global Environmental Justice Atlas records about 2520 environmental conflicts worldwide (Temper *et al.*, 2018) with at least 347 of these conflicts attributed to the construction of renewable energy facilities, dams, and climate fixes, this number could be higher given the mushrooming development and population increase especially in Africa.

In countries like Chile, such conflicts are attributed to the communities' desire for more sustainable local development (Barton *et al.*, 2012; Maher, 2019). This way, the community is assured of having their present needs met with a guarantee that future generations will also be able to meet their needs. Sustainable development promotes ownership of the projects by the communities thus, their sustainability would also be assured. However, where the communities are uncertain about the project's impacts, resistance of such developments is unavoidable. In Chile for instance, Escobar (2006) and Maher (2019)

revealed that the discontented communities opposed and problematized the imposition of such developmental projects, including extractive sectors, for fear of negative ecological, economic, and cultural impact frequently observed in many the developing countries.

Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) are essential for adapting projects to local conditions, mitigating the projects' adverse consequences and promote their social acceptability. However, Unruh *et al.* (2019) suggested that the level to which such safety measures are applied and imposed differs extensively within and between States and developers. It has increasing become unavoidable to distance from allegations of compromised ESIAs and RAPs considering that these reports are paid for by the project proponents. Unruh *et al.* (2019) also indicate that ESIAs and RAPs reports are often completed as formality. Yet, they are meant to examine how to abate damaging impacts and maximize profits. So the consequences are the inevitable project implementation conflicts.

The project developmental conflicts are related globally. In their article on public responses to carbon dioxide (CO_2) storage sites: lessons from five European cases, Oltra *et al.* (2012) suggested that community reactions to carbon capture storage (CCS) projects were responsible for the cancellation of, or threat to, several CO_2 storage projects during period 2009 - 2011. For instance, at Beeskow area in Germany, the wider public anxiety was strongly linked to the possible risks of the CO_2 storage. It is certain that public was concerned over the potential leakages with possible fatal accidents, groundwater contamination due to the challenge of controlling or eliminating the carbon once storage began.

Also, the residents were anxious over the project’s probable undesirable effects on

the real estate market and tourism, a likely support to their livelihoods. Besides, they argued that the CCS development would have reduced the potential to invest in renewable energy, and they would have been denied access to Vattenfall's exploration results. Such concerns could have been foreseen by ESIAs, and adequate mitigation measures such as access to information should have been put in place to promote the acceptability of the project by the communities.

In the Barendrecht (Netherlands) case, the public's main concern hinged around the project's potential harmful effects on their health and monitoring of the CO_2 while the developer benefited from the project by obtaining government funding to pollute, which deviated from the polluter pays principle (Oltra *et al.*, 2012; Dütschke, 2011). This is evidence of lack of enforcement of existing regulatory frameworks that could have averted potential conflicts. The projects faced resistance from the politicians, local councils, several other societal stakeholders such as the farmer associations and the local community. The local citizens protested as soon as the projects were announced, a clear indication of their inadequate involvement in the designs of these projects. Their resistance involved development of internet sites, display of posters and organized protests to communicate their frustration, leading to the cancellation of the project (Oltra *et al.*, 2012; Dütschke, 2011).

In Spain, an 800 megawatt (MW) Combined Cycle Gas Turbine 800 (CCGT) power plant was constructed in Boroa, to convert Basque Country into self-sufficient energy production by 2010. However, similarly to the above recorded cases in Germany and Netherlands, this project attracted seven years protracted conflicts with the local community (Baigorrotegui, 2015), a consequence of unresolved conflicts and/or improperly resolved

conflicts. The community was displeased with the overlooked project assurance of employing more residents, and the ecosystem hazards and adverse effects on people's health and quality of life (Baigorrotegui & Santander, 2018).

Notably, the plant installation was marred with three years of community protests resulting in its delay. However, the plant was completed and inaugurated in 2005 (Baigorrotegui, 2015; Baigorrotegui & Santander, 2018), thanks to the likely power imbalances between the parties, where the mighty, in this case the developer carried the day.

In Indonesia, South Asia, renewable and environmentally friendly energy discourse clashes with social injustice issues (Fajri *et al.,* 2018). While the geothermal potential was addressed by the government through its escalated development, the launch of a 20 MW geothermal power plant in Bukit Kili-Mount Talang in West Sumatra in 2016, was one of the initiative that was encumbered with local resistance (Fajri *et al.,* 2018). In this case, geothermal resource exploitation plan was rejected by the communities around Bukit Kili-Mount Talang, and in Nagari Batu Bajanjang village where community land was to be used for geothermal exploration activities (Fajri *et al.,* 2018). Adequate public participation and negotiation arrangements would have helped to avert resistance from the civil society in West Sumatra, communities, students, Non-Governmental Organizations (NGOs), and other sympathizers, that lead to injuries and delays to establish the plant (Fajri *et al.,* 2018).

Tangkuban Parahu Geothermal plant's development in West Java, Indonesia was halted following the residents' objection (Eko, 2015). Eko suggested that the communities believed the locations identified for the exploration and drilling activities were too near to their houses. The residents were anxious over possible disasters such as Lapindo-like that

occurred in East Java, where the drilled well collapsed and started spewing mud (Eko, 2015) and landslides. This resulted in demonstration and protests against the development, by at least eight hundred (800) people drawn from the affected villages necessitating the halting of the project (Eko, 2015). Whereas geothermal is a green energy, it is restricted to specific locations such as near tectonic plate boundaries or hot spots. This resource also suffers from potential earthquakes and landslides due to drilling that causes instability underground. Therefore, geothermal development in West Java could have suffered from poor planning and inadequate public participation in the project design that would have promoted its acceptability.

The increased need for palm oil as a raw material for derivative products, necessitated the increase in emergence of palm oil plantations in Indonesia (Obidzinski & Chaudhury, 2009; Rokhim *et al.,* 2020). The government had to expand area under plantations to about 11.20 million hectares by 2016 (Obidzinski & Chaudhury, 2009; Rokhim *et al.,* 2020) to meet the increasing local and national demands for palm oil and timber. The government also planned to double the existing production of crude palm oil by 2020 to around 40 million tons, necessitating an increase in terrestrial under plantations (Gingold, 2010). However, the nature and scale of these activities (Gritten & Mola-Yudego, 2010; Mola-Yudego & Gritten, 2010; Obidzinski et *al.,* 2012) resulted in at least 600 conflicts between the plantation companies and local communities over relocation, disruption of livelihood sources and restricted access (Dhiaulhaq *et al.,* 2014; Rokhim *et al.,* 2020). Proper conflict management and application of lessons learnt from previous experiences by the developer could have minimized the increase in conflict cases.

Oil extraction in the Niger Delta region, Nigeria has been associated with conflicts for decades. Oseremen (2016) links these conflicts to the flaring of gas generally rallied round the undesirable externalities of the oil extraction activities of the multi-state oil firms working in the Niger Delta area. Notably were adverse impacts on the residents, underdevelopment of their area with negligible contributions towards the country's economy (Oseremen, 2016). While Shell Petroleum Development Company and the National Petroleum Corporation accrued billion dollars from the oil extracted from the region's Ogoni land (Boele *et al.,* 2001), the Ogoni community complained of inadequate benefits from these companies. The residents were exasperated by the extensive environmental degradation and underdevelopment emanating from the extraction of oil. The displeasure resulted in violent protests by the Ogoni community. However, the community was militarized resulting in unimaginable consequences that could have been avoided including (Boele, 1995) thousands of deaths, detentions, crucial leaders' exile, rape, mutilation of women and children, and the project collapse (Boele, 1995).

Kenya is also not immune to natural resource conflicts. For instance, the oil and wind projects in the Northern-Western, Turkana County, generated conflicts between the local communities and operating companies. The communities were displeased with the unfulfilled pledges concerning land compensation, improved water supply and employment prospects (Schilling *et al.*, 2015; Schilling *et al.,* 2016, 2018; Vasquez, 2013). These concerns were exacerbated by poor communication between Tullow and the residents (Johannes *et al.,* 2015; Schilling *et al.*, 2016). As a result, Tullow's operations have frequently been interrupted in cases where the community erected road blocks following their unmet demands (Schilling *et al.,*

2018). Further, the fencing off, of all sites, including for extraction and oil storage, would have escalated the conflict between the developers and the residents considering the disruption fencing would have caused to the pastoral migration routes.

Benefit sharing between the developers and the local communities is a potential threat to a proposed development. The Mui Basin coal exploration project in Kitui, Kenya, is an example of projects that faced community resistance following their discontent with the benefit-sharing arrangement. Besides, Neumann (2015) and Omondi *et al.* (2020) revealed that the community also accused the National Government of lack of transparency in awarding the tender to Fenxi company in 2011 delaying its implementation, an evidence of poor governance. The community was still contesting the project by the time (Omondi *et al.,* 2020) were conducting their research on public participation in Africa's mining sector.

Further, the proposed 1050 MW Lamu coal power plant had been expected to be the largest in East Africa and the first in Kenya. The project was expected to be operational in 2020. However, its construction scheduled to start in October 2015 had not kicked off as of November 2018 (Banktrack, 2020; Boulle, 2019). This was as a result of the court battles fronted by the Civil Society Organization Save Lamu that had petitioned the government to halt the construction. The residents were nervous over inevitable environmental and health impacts, including pollution of fishing grounds that would have rendered hundreds of fishermen jobless and premature deaths due to air pollution. The sustained protests saw the project financier, Industrial and Commercial Bank of China (ICBC), withdraw its financial plans, citing imminent environmental and social hazards. The adequacies of the ESIAs and their implementation in the country should be reviewed towards realization of sustainable development.

The geothermal industry expansion in the Rift Valley ignited conflicts over land with the Maasai community. There were accusations of community human rights abuse regarding compensation payments and relocation (Shiloh, 2015). The indigenous communities took the government to court because of the allegations of granting or selling title deeds that conflicted with their customary tenure (Shiloh, 2015). Those living near geothermal sites claimed to have been vehemently evicted, environmental degradation by the geothermal projects and breaching of their constitutional rights. The inhabitants also alleged that land acquisition for the expansion of the geothermal projects was an extension of policies depriving land upon which they relied for sustenance (Shiloh, 2015).

The conflicts arising from the developmental projects have demonstrated the potential to delay these crucial projects, increase their costs, lower their acceptability by the community, lose social licenses, lead to their terminations and loss of lives (Batel *et al.,* 2013; Jobert *et al.,* 2007; Karytsas *et al.,* 2019; Wei *et al.,* 2016). There is therefore a need for appropriate conflict resolution mechanisms like mediation, to reverse these trends.

2.3 Conflict Resolution Mechanisms

Conflict resolution refers to a wide variety of ways of resolution of divergences that may be manifested at different levels of the society. Similarly, Sanson & Bretherton (2007) stated that conflict resolution offers methods of dealing with disagreements, in a way that is non-violent, avoids domination or subjugation by one party over the other, and, rather than exploiting one party, aims to meet the human needs of all.

Sanson & Bretherton (2007) suggested that conflict resolution is founded on the following basic principles: (a) a cooperative endeavor, where the focus is on cooperation rather

than competition. In this case, the parties see the problem facing them as one on which they can collaborate to find a mutually agreeable solution, (b) the solutions sought are integrative. That is, the resolutions pursued meet the interests and needs of all parties, by offering a personal anecdote. The parties attempt to explore options to increase the size of the joint gain without respect to the division of payoffs, (c) the foundation is an understanding of all parties' interests. The focus is on the deeper issues or interests underlying the conflict, pursuing a new and creative solution that is better than either of the parties' initial positions. The underlying interests may include the needs, wants, fears and concerns which emerge via a process of unpacking the conflict and each party's initial positions, and (d) both the process and its outcome are nonviolent, essentially a commitment to the values of peace and non-violence.

The resolution proponents underline the raising of fundamental issues because they believe that conflict can be resolved. According to Mitchell (1981), not merely will disruptive conflict behaviour cease and hostile attitudes and perceptions at least be ameliorated, but the ultimate source of conflict. Thus, sustainable management of issues. Conflict resolution aims to address causes of conflict and seeks to build new and lasting relationships between hostile parties. It helps the conflicting parties to explore, analyze, query and reframe their positions and interests, and moves them from the destructive patterns of zero-sum conflict to positive-sum that is, win-win, constructive outcomes (Miall, 2004).

Conflicts are part of our daily lives. Conflicts are manifested in different levels including in our families, workplaces, and development projects among others. They have been in existence throughout human history, and they have been resolved in diverse ways. According to Moore (2014) conflict resolution's roots extend into almost all world civilizations, both western

and eastern. Conflict resolution is also ingrained in major world faith, including Judaism, Christianity, Islam, Hinduism, Buddhism and Confucianism. For instance, in Christianity, the Bible records King Solomon's judgment between the two women claiming the same child, a case that relates to mediation and negotiation's philosophies.

Conflict resolution also exists in many indigenous and traditional cultures throughout the Global North and South (Moore, 2014; Muigua, 2017). African countries have had their ways of resolving conflicts to foster reconciliation, sustenance and improvement of social relationships in families, communities and beyond. The traditional resolution mechanisms included negotiation, reconciliation, and mediation, among others embedded in traditions and customs of African traditions and customs, which have been in use until the introduction of the Western judicial system by the colonialists (Makwudo & Obij, 2020). These included the England's common law that resulted in the establishment of court systems (Mac-Ginty, 2008), leading to increased determination of conflicts in courts in Africa.

However, the access of justice via these courts is confronted with innumerable challenges. Gloppen & Kanyongolo (2007) and Muigua (2015) document inter alia, high costs, backlogs, complex rules of procedure, the cultural, economic, and socio-political orientation of the society, lack of financial liberation, and discriminatory application of laws. These constraints present an opportunity to consider Alternative Dispute Resolutions (ADR) such as, mediation and negotiation to avert frustrations, and delayed justice beyond Kenya. Similarly, in the Global North, particularly in the United States, the modern renaissance of mediation began in the mid-1970s following the prominent jurists and attorneys decry of the judicial system's fate that seemed increasingly bogged down in a flood of litigation during a conference. This is an

advantage to mediation as also observed by Moore (2014) which alludes to mediation's growth with its continued application in resolution of conflicts in the society in the Global North.

Internationally, the ADR mechanisms are known as feasible dispute management mechanisms (Hamza et *al.,* 2017; Muigua, 2018c). The ADR's legal basis for its application is enshrined in Article 33 of the Charter of the United Nations. This Charter requires conflicting parties to first seek solutions through negotiation, enquiry, mediation, conciliation, arbitration and judicial settlement and other peaceful resolution means.

Locally, the promulgation of the Constitution of Kenya (2010) presented a critical foundation to the use of ADR including mediation in resolving conflicts in the country. In Article 159, the Constitution directs the Courts and tribunals to promote alternate mechanisms of ADR that is, mediation, reconciliation, arbitration and traditional dispute resolution mechanisms. However, the promotion of ADR should be in line with the Bill of Rights, and not be repugnant to justice and morality or results in outcomes that are repugnant to justice or morality and if they are not inconsistent with the constitution or any written law. Thus, this Article provides prospects of addressing case backlog and accelerate access to justice in the country through mediation.

2.4 Mediation

2.4.1 Understanding Mediation

Mediation is the use of an impartial third party to resolve a conflict between parties. Scholars, (Bercovitch, 2006; Moore, 2014; Muigua, 2019a) suggest that mediation is one of the most famous mechanism of ADR approaches, which has been used to resolve conflicts since antiquity. Mediation existed even before the other ADR mechanisms were conceived. However, all ADR mechanisms focus on deeper issues of the parties (Idornigie, 2007;

Muigua, 2017; Sanson & Bretherton, 2007). These include the needs, wants, fears and concerns underlying the conflict, pursuing a new and creative solution that is better than either of their initial positions.

While mediation's definitions have been formulated over time, they remain related. In early eighties, mediation's distinct feature was seen as an intermediary activity in its purpose of achieving some compromise settlement of issues at stake between conflicting parties, or at least ending unsettling conflict behavior (Vukovic, 2014). The activity was perceived as a way of conflict management and conflict resolution which involves third parties to aid disputants in reaching a voluntary agreement (Raymond & Kegley, 1985). Third party involvement is seen through actions of facilitation including setting of the agenda, communication simplification, and elucidation of respective positions, reconceptualization of issues, bargaining facilitation and support for agreement.

More recently, mediation has been defined as a conflict resolution process in which, a mutually acceptable third party, who has no authority to make binding decisions for disputants, intervenes in a conflict or dispute to assist the parties to improve their relationships, and enhance communications. This also involves the use effective problem-solving and negotiation procedures to reach voluntary or mutually acceptable understandings or agreement on contested issues (Bercovitch, 2006; Bush & Folger, 2005; Moore, 2014; Nwazi, 2017; Vindeløv, 2012; Wall *et al.*, 2011). Muigua (2017) includes informality, consensually and confidentiality and non-binding dispute resolution process to mediation's definition.

Mediation requires warring parties to voluntarily enter into mediation and choose the

mediator who proposes solutions for their consideration and acceptance. The mediator only controls the process and parties provide the solution, enabling them to live with the outcome of the resolution. Moore (2014) observes that mediation is initiated when disputing parties are unable to start productive talks on their own or have initiated discussions that have hit a gridlock. Trust and equalities among parties play an important role in averting stalemate in discussions (Bercovitch & Jackson, 2001; Yurdi *et al.*, 2010).

2.4.2 Elements of mediation

Third party

A third party is a person or groups of people, besides those involved in a tussle or conflict. Moore (2014) sees third parties as those generally independent of disputants. They are neither one of the primary parties involved in a conflict, a secondary party who either sides with or supports one or more disputants, nor a party who is likely to be significantly affected or receive direct benefits from the resolution of disputants' differences. Third party helps those in a dispute to find a resolution. They support them towards improving their relationship from an adverse and destructive to a positive and constructive through finding solutions to their issues (Moore, 2014).

Acceptability

Acceptability means agreeing to work with something or someone. It's the willingness of parties involved in a dispute to welcome, or tolerate another party whose intention is to help them reach an agreement over a contested issue (Moore, 2014). However, the parties might not necessarily welcome a mediator or accept the mediator's recommendations on the

process in some cases. As aptly put by Moore (2014) and Vindeløv (2012), acceptability implies that the antagonistic parties are willing to listen and consider the mediator's suggestions, and on some occasion substantive considerations to resolve their differences.

Acceptability of someone or something could be tied to diverse factors. Moore (2014) highlights such factors to include inter alia, individual or multiple parties' perceptions regarding the third party's impartiality and independence, lack of connection, or in some cases desirable links to one or more disputants; and whether they are perceived to be neutral, unbiased, fair and objective toward any of the contested concerns. These factors may also include, the mediator's reputation, his or her past experience in resolving similar issues, mediator's personality, their personal chemistry with the disputants, age, status, ethnicity, gender, knowledge of the contested issues, affiliation with an institution or given organization, and recommendation from trusted friend among others (Moore, 2014).

Autonomy

Regarding autonomy, only parties in a dispute make decisions on their bone of contention. This enables the parties to live with a resolution reached by themselves, thus guaranteeing the sustainability of such an agreement. The intermediaries may only step in to help one or more of the disputant parties, at the behest of the organization concerned about the conflict or take unilateral action on their own (Moore, 2014; Muigua, 2017). A third party cannot unilaterally or force the antagonistic parties to resolve their differences or enforce a judgement they make (Moore, 2014).

The mediator's role is to reconcile the competing needs and interests of the involved parties. They help the disputants to identify, understand and articulate their needs and

interests to each other, with a focus on pertinent issues. The mediator also helps the parties to identify mutually acceptable ways to address a conflict, negotiate an exchange of promises or tangible benefits that meet their standards of fairness, and redefine their relationship in a manner that is mutually acceptable (Moore, 2014; Vindeløv, 2012).

Enhancing communication

This refers to improving the ways that parties communicate information involving substantive issues and their needs and interests, preferred procedures for resolving their differences, and their feelings and relationships (Moore, 2014). The parties can only reach a mutually acceptable understanding when they begin or continue to talk with each other towards this end. Moore (2014) suggests that parties might have to change how they communicate with each in cases where they cannot begin or continue productive talks on their own. Thus, a third party becomes helpful in such cases.

Voluntariness

Mediation seeks to have parties to reach mutually acceptable resolutions without being forced. Muigua (2017) clarifies further that voluntariness exists in mediation if both parties make real and free choices based on effective participation in the process. In cases where there might be inequalities and significant power imbalances, mediators must ensure genuine and active participation of all parties, and that the outcome is non-coerced (Baylis & Carroll, 2005). While voluntary participation may exhibit some pressure to parties from external figures such as friends and authoritative leaders for parties to negotiate with the help of a mediator, the disputants are not are forced to reach agreements (Moore, 2014).

Informality

As an informal process, mediation is not guided by the rules and procedure as happens in court of laws. Mediation has no direct legal basis or institutionalized authority since it relies on personal features and the mediator's resources including wisdom, respect, friendship, knowledge and skills in negotiating (Muigua, 2017). Informality makes mediation more flexible and fast considering that parties can agree on how, and when to resolve a conflict as also observed by (Bush & Folger, 2005).

Confidentiality

Confidentiality in mediation helps the parties to trust the process, and also open up to enable reach a consensus. While confidentiality hides the identities of both parties and covers mediation content (Vindeløv, 2012), it protects the parties from potential retaliation. Confidentiality assures parties that any admissions, proposals or offers for solutions will not have any consequences beyond the mediation process and cannot, as a general rule be used in subsequent litigation. This assurance is important especially in commercial or developmental disputes where parties wish to protect commercial secrets (Hamza *et al.,* 2017; Muigua, 2017).

Interests based focus

Mediation promotes the emphasis on the interests of the parties as opposed to their rights, thus does not have any adverse impact on prior relationships between parties. It empowers and fosters parties' relationships because their values are addressed, and their needs, interests and opinion are recognized (Hamza *et al.,* 2017; Muigua, 2017). The comprehension of the

underlying interests and concerns by parties helps to foster sustainable relationships between them.

Non-coerciveness

In mediation, parties agree to negotiation without being forced. They agree to enter into a process where they can create their own solutions and freely enforce the agreement (Mwagiru, 2006). Thus, the outcomes reached are generally acceptable, durable and long-lasting. This helps reduce costs that would have otherwise been used to employ an attorney to force compliance with the agreement as rightly observed by (Hamza *et al.,* 2017).

Flexibility

Mediation's flexibility emanates from its voluntariness, where parties agree on virtually everything pertaining to the resolution of their conflicts as also observed by Muigua (2017). Also, flexibility benefits from the parties' autonomy over the process, the mediator and the results. Thus, the parties participate in decisions regarding the definition and designing of the process, including when, how and where the process could take place.

2.4.3 Mediator's role and support

Mediator plays a wide range of roles in assisting the parties to resolve disputes. As clearly outlined by Moore (2014) these roles include: (a) opening of the communication channels or facilitate better communication if parties are already talking, (b) helps parties recognize the rights of others to be involved in the negotiations, (c) provides procedures and often formally chairs the negotiation sessions, (d) educates unskilled or unprepared negotiators in the bargaining process, (e) provides parties with procedural assistance and also links them to

external experts and resources like lawyers and decision makers that could help parties enlarge acceptable settlement options, (f) helps parties' examiner problem from diverse viewpoints facilitating their appreciation, (g) helps build reasonable and implementable settlement, and (h) takes the initiative of moving the negotiations by making substantive suggestions in some cases.

The mediator can encourage and model active listening for the identification of interests; reduce the level of tension between parties and keep the negotiation focused (Bercovitch & Foulkes, 2012; Bercovitch, 1996; Vindeløv, 2012). The mediator can also promote early agreements on simple issues to increase momentum, help parties save face when conceding, and advance a proposal which would be rejected if it came from the other party.

As a scapegoat, the mediator takes up the blame for the unpopular decisions which parties maybe unwilling to accept. This helps to maintain the parties' integrity and also possibly enable them gain their constituents' support (Bercovitch & Foulkes, 2012; Bercovitch, 1996). Further, in cross-cultural conflicts, the mediator could expound the cultural meanings of one party's conduct towards the other (Bercovitch & Foulkes, 2012; Bercovitch, 1996), thus avert possible misunderstanding.

2.4.4 Mediation processes: a theoretical approach

Mediation is conducted in three phases including the pre-mediation, actual mediation and post-mediation phases. Bercovitch (2006) and Muigua (2019a) observe that mediation's processes are similar to negotiations. However, additional resources, expanded relationships and open communication channels, introduced by a mediator into conflict management

distinguish mediation from negotiation. The mediator's entry into a conflict transforms its structure from twosome into a threesome, thus becoming a party to the conflict pursing own interests like other conflict parties (Bercovitch, 2006; Muigua, 2019a).

2.4.4.1 Pre-mediation phase

The pre-mediation is an important phase in mediation process since it lays the foundation which will determine mediation's success. During the pre-mediation, the parties make decisions regarding their voluntary participation in the mediation process. Also, the parties ought to know the mediator to determine his or her acceptability. Vukovic (2014) suggests that it would be the mediator's responsibility to convince the parties of the value of their services before the start of mediation process, i.e., in cases where parties are hesitant about the mediator.

This phase also entails mediator understanding the conflict background, and deciding whether to mediate the conflict or not. The mediator determines the ripeness of the conflict for resolution. Vindeløv (2012) suggests that mediator must explain and answer any questions regarding the advantages and disadvantages of the mediation process. This would definitely help the parties to appreciate the mediation process. The mediator must ensure the parties understand the process, and assure the parties of confidentially of the information shared in connection to mediation, thus help to boost the parties' frankness.

The mediator ascertains the stages of the mediation process to be conducted, which might start with a sequence of secluded meetings (Brandon & Stodulka, 2008). These meetings help to determine the suitability of the case for mediation, the parties' willingness to take part in person in constructive negotiations and when the mediation starts including

identification of a neutral venue. According to Muigua (2017) and Zartman & Berman (1982), the parties and their lawyers could engage in the pre-mediation preparation should the process be fruitful. Whereas the parties' advisors maybe present during mediation, the mediator is mandated to clarify the mediation procedure for them, and their role in the same (Vindeløv, 2012).

2.4.4.2 Mediation phase

The mediation or negotiation phase involves the deliberations on probable negotiation strategies. These approaches may include facilitative or interest-based mediation, settlement or shuttle mediation, transformative mediation, expert advisory or evaluative mediation, traditional-based mediation, wise counsel mediation and reflexive mediation as outlined below:

(a) Facilitative mediation or interest-based mediation

Facilitative mediation is a combination of process intervention with an integrative approach to bargaining (Alexander, 2008). In this strategy, the mediators are required to create a conducive environment for negotiation and coach the parties through a negotiation process. The facilitative mediator focuses on integrative interest-based negotiation. The mediator encourages the parties to negotiate based on their needs and interests in regards to a conflict. Further, Alexander (2008), Drews (2008) and Gould (2010) observe that the parties are also encouraged to recognize the disagreement from the other party's standpoint, instead of their strict legal rights or distributive, positional-based bargaining.

The interest-based mediation's goals are party autonomy and self-determination (Alexander, 2008). In this light, the facilitative mediators are confined to mainly process

interventions, and they neither counsel the parties on the problem nor offer legal information. Facilitative mediators' qualifications are based on their process and communication skills, and their lack of connection to the parties. Facilitative mediators play a consultative role and not advocacy when the parties' legal representatives are present. Thus, parties speak for themselves with the support of their legal representatives.

Alexander (2008) suggests that facilitative mediation may be useful when, the parties seek to continue their relationship, and the parties can negotiate on a level playing field, and are struggling to start the process or have reached a bottleneck in talks. Also, facilitative mediation is important when there are opportunities for creative and future-focused solutions to address the parties' needs and interests in the conflicts, and in multiple-issue disagreements, especially where the issues comprise legal and non-legal elements (Alexander, 2008; Whiting, 1992).

(b) Settlement/shuttle mediation or problem-solving approach

In this approach, the parties are inspired to compromise so as to settle their disputes (Drews, 2008; Gould, 2010; Muigua, 2017; Vindeløv, 2012). The parties should be willing to let go some of their interests to resolve a conflict. Settlement mediation is predominantly based on process orientation, although some mediators tend to intervene directly in the content of the dispute (Alexander, 2008). However, the basis of interaction is positional bargaining discourse, aimed at delivering services and access to justice.

In addition, settlement mediation promotes party autonomy, in consistent to its focus on process (Alexander, 2008). Often, the parties have their legal representatives present during settlement mediations, and the mediator's role hinges around the positional bargaining

coach (Alexander, 2008). The mediator is mandated to establish an encouraging environment for settlement negotiations to occur between the parties. However, Alexander (2008) points out that encouragement by settlement mediators can quickly result into coercive techniques, which urges parties to make concessions, a potential threat to a resolution.

The nomination of settlement mediators based on their technical or legal knowledge as put by (Alexander, 2008), helps to build the parties' confidence in the mediator knowing his or her understanding of the technical aspects of the conflict will lead to its resolution. Alexander (2008) and Vindeløv (2012) suggest that settlement mediation may be useful when positional bargaining is preferred over interest-based negotiations. This strategy is more appropriate in business settings, where the result is more significant than the relationship. The parties are more concerned with the gains for their businesses than future relationships. Only the parties' legal representatives attend the mediation, and the parties are negotiating over a 'fixed pie,' and in single-issue disputes (Alexander, 2008; Vindeløv, 2012).

(c) Transformative mediation

Transformative mediation is an explicitly value-based and process oriented approach where 'purpose drives practice,' (Vindeløv, 2012). Transformative mediation as stated, seeks to transform the parties relationships from hostile to friendly, through addressing the root causes to their conflict. According to Alexander (2008), the mediators are selected based on their process and relationship skills, and their knowledge of conflict sources, psychology, and behavioral science, which is useful in transforming a conflict. The mediators are required to create an optimal environment for the parties to engage in transformative discussions, and

empower the parties to articulate their own feelings, needs, and interests, besides recognizing those of the other party (Alexander, 2008; Bush & Folger, 2005; Vindeløv, 2012).

Therefore, transformative mediation is recommendable in cases where there is a need to address the root cause to a conflict, and where parties are willing to reach a resolution. It is also useful where conflicts are about relationships, whether professional or personal among others, and where parties' values and principles are at stake (Alexander, 2008). Thus, transformative mediation helps heal relationships vis-à-vis in settlement mediation.

(d) Tradition-based mediation or organic model

In tradition-based mediation, the mediators are problem-oriented. The mediator's wisdom, status, and persuasive presence is more significant than their technical expertise (Alexander, 2008). Thus, tradition-based mediation seeks to restore stability and harmony to the community or a particular group as also observed by Alexander (2008). Often, the mediators are leaders, elders or chiefs who have the responsibility of ensuring that community norms are upheld, and that conflict resolution outcome is in line with these norms.

These mediators are more concerned with community norms and values than individual interests with a focus on repairing relationships within the group. Community members can participate in the resolution of a given conflict. Thus, tradition-based mediation is more suitable in communities with strong socio-cultural, religious and political norms, and desire to handle their conflicts without external interference. Similarly to Alexander (2008)'s observation, tradition-based mediation may also be beneficial in industries, professional and business communities where norms of the group are more persuasive than the legal norms.

(e) Expert advisory mediation or evaluative mediation

This strategy involves a high level of mediator involvement in the problem and adopts a largely positional negotiating method (Alexander, 2008). Parties are encouraged to reach settlement according to their rights and entitlements within the anticipated range of court remedies (Drews, 2008; Gould, 2010; Muigua, 2017). Thus, expert advisory mediation seeks to efficiently deliver settlements and access to justice, in support of speedy and lawfully or technically oriented settlements (Alexander, 2008).

Often, the mediators are senior barristers or other specialists nominated based on their expertise in the subject matter of the conflict and their seniority. Thus, mediators can furnish parties with technical or legal information and standards (Alexander, 2008; Zena, 2000). Further, they can also advice parties on the case's merits, appropriate settlement terms, and probable outcomes if the matter is arbitrated or adjudicated. Therefore, expert advisory mediation may be convenient where the parties' relationships are not a priority, parties are seeking a faster determination of their dispute and are not contemplating mediation.

(f) Wise counsel mediation

In wise counsel mediation, the mediators evaluate the merits of a case with a focus on the parties' bigger interests and concerns. The mediators seek to ensure access to justice in the sense of a fair setting, efficient conflict management, and long-term interest-based solutions (Alexander, 2008) thus, the probing goes beyond parties underlying interests to enable offer appropriate solutions. Although, the parties make the final decision, the mediator is also responsible for the solutions. These mediators are selected based on their high standing in the community, good communication skills, insight, sense of fairness, and their capacity to

comprehend all aspects of the conflict (Alexander, 2008).

Wise counsel mediation is recommendable in multiple-issue disputes with various parties requiring applicable advice on how to resolve their dispute and manage the future relationships. It is also suitable in cases where parties have power imbalances e.g., authority, resources and literacy, and also where parties are seeking to allocate moral responsibility for the outcome to a 'legitimate' third party, and where parties have unrealistic expectations and are seeking a practical solution (Alexander, 2008).

(g) Reflexive mediation

Reflexive mediation is inspired by other mediation approaches. As clearly explained by Vindeløv (2012), reflexive approach is "internal, concerned with the mediator's world view," and the values which are integrated in and which are part of the mediator, both in and outside mediation. Rothman (2014) describes reflexive mediation as an interactive process that considers the relationship between self, other, and context. Thus, the reflexive process involves engaging in the moment as well as discerning and, as much as possible, understanding the parties' thoughts and feelings during an encounter in a certain period and place (Rothman, 2014; Vindeløv, 2012).

The mediator's role in reflexive mediation is non-directive, resulting in acceptable and enduring outcome, unlike in courts and in arbitration where the judges and arbitrators give orders and guidelines to be followed (Muigua, 2017). The mediator assists the parties to negotiate and reach mutually agreeable and tolerable resolutions, which they can live with. The mediator is required to lead the parties in developing the mediation ground rules. The parties should understand and agree to mediation rules (Gould, 2010; Muigua, 2017). Such

rules might include inter alia, parties to speak one after the other, and without being interrupted. The mediator could signal those disrupting others to stop, and also halt the mediation process to attend to those disrupting (Knight, 2015; Vindeløv, 2012).

During mediation, the mediator is required to use active listening techniques such as, listening keenly, being attentive to specifics, listening to the unspoken words, reassuring parties, and paraphrasing to ensure parties understand among others, to assist the parties to develop conflict solution.

As an active listener, the mediator must avoid paying attention their own emotions and distinguish own preconceptions. Mediators must also avoid assuming, demonstrate compassion, conduct themselves in a manner that demonstrates understanding and acceptance, and repeat or reframe important views (Muigua, 2017; Vindeløv, 2012). The mediators must also conduct separate meetings between the mediator and either of the parties. Thus, promote free participation by these parties.

Further, the mediator's competency in communication is key in helping parties to open up regarding their interests. As clearly outlined by Vindeløv (2012), the mediators must be able to communicate non-verbally. This might include, keeping eye contact with the parties; nodding; speaking in different tones; following keenly what speaker is saying and demonstrating a sincere interest in what is being said. The mediator should also be able to get the rivals to talk to each other, and determine when it could be essential for the parties to walk away with their pride intact (Muigua, 2017; Vindeløv, 2012).

2.4.4.3 Post-mediation phase

The post-mediation phase is the most critical of the whole process. It entails implementation

of what was negotiated in the agreement. Once the parties reach a consensus on contentious issues, the mediator should help the parties to develop an effective plan for implementation of the results. The parties should also be assigned different roles towards implementation of these results. Involvement of the parties will promote ownership of the results and actualization of the agreement.

Similarly to other project activities, the mediation agreement would need a monitoring and evaluation mechanism to ensure that what was agreed upon is being implemented as such. Thus, help in building trust in the mediation process and results, avoid suspicion, repair and restore ruined relationships and foster peaceful co-existence between the parties.

2.4.5 Mediation processes: a practical approach

The application of mediation in the resolution of natural resource conflicts has been applied especially in South Asia, bridging the gap between theory and practice. Numerous studies including (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2014, 2015; Rokhim *et al.,* 2020) have documented cases where third parties were involved in resolution of over six natural resource conflicts in Thailand, Indonesia and Cambodia.

In these cases, the mediators worked together in helping the antagonistic parties to reach mutually agreeable solutions, a clear demonstration of importance of teamwork. Different mediators come with diverse skills and experiences that is fundamental in successful mediation. Although it took between six months and six years for the six mediations to get a pact as recorded by Dhiaulhaq *et al.* (2015), it is certain that conflicts are varied, and the success of mediation depends on the nature of conflicts, the mediators competency, and the parties involved

in the dispute.

Notably, all the six mediation cases involved three mediation phases including the pre-mediation (pre-condition), mediation (series of assisted negotiations), and post-meditation (after the pact is reached) stages (Dhiaulhaq *et al.,* 2014). The pre-mediation comprised of ground setting with numerous preparatory activities. Dhiaulhaq *et al.,* (2014) recorded activities such as the social preparation to build trust, relations and understand the culture and conflict issues. In Jambi and Riau (Indonesia) mediation cases, the mediator conducted a conflict analysis to gain a deeper comprehension of the conflict such as the history and the fundamental concerns (Dhiaulhaq *et al.*, 2014), attributable to successful mediation.

Whereas, the pre-mediation phase also involved the interactions between the mediators and the conflicting parties to clarify the mediators' objectives and have parties agree to mediation, it also helped to build the rapport and promote mediator's acceptability. Thus, the mediators were able to assess conflict through information gathering. Further, their acceptability could have also enabled the mediators to analysis the possibility of mediation by considering the parties' willingness and commitment to address the conflict, clarity of issues, and availability of the resources. Information gathering in Chiang Mai (Thailand) case was conducted through field observation, interviews, FGDs with community leaders and other villagers (Dhiaulhaq *et al.,* 2014; Dhiaulhaq, 2015).

Trust building between the mediator and the antagonistic parties was necessary to facilitate acceptability of the external mediator (Dhiaulhaq *et al.,* 2014; Dhiaulhaq, 2015). In Jambi (Indonesia) case for example, the residents were apprehensive over the mediator's independence and neutrality, while in Riau (Indonesia) the pulp and paper company was

concerned that the mediators would have favored the community following their prior involvement in advocacy on behalf of the community. However, these parties were pursued into talks after numerous intensive meetings, thanks to trust building and mediator's acceptability.

The pre-mediation phase also involved the designing of the mediation process, which included agenda setting, listing the key actors, the parties' roles and responsibilities, and possible costs. Also, the representatives were selected, where the conflict involved many community members, like in the case of Jambi (Dhiaulhaq *et al.,* 2014; Dhiaulhaq, 2015). The mediator assisted the parties in determining their delegates through numerous meetings. In Riau case, the "team eleven," which consisted of the representatives of the village government, religious leaders, customary leader, the youth leaders and influential persons represented the community in mediation (Dhiaulhaq *et al.,* 2014).

The community representatives were also empowered during the pre-mediation stage to facilitate their effective participation in the mediation process, certainly promoting acceptability of the results. Whereas it took about a year for social preparations in Kanchanaburi (Thailand) mediation case between the community and the National Park Authority (NPA) (Dhiaulhaq *et al.,* 2014; Dhiaulhaq, 2015), social preparations during pre-mediation underscores the importance of this phase towards moving to mediation and sustainability of the agreement. During the mediation stage, several consultations were enabled to identify and discuss issues and ways to build a sustainable relationship between parties. Importantly, the mediators led the parties in discussions and agreement on ground rules for the mediation processes, promoting the ownership of the process. For instance, in the Jambi case, the rules included a mutual commitment to confidentiality, respecting others when they speak, the prohibition of physical

and verbal attacks, allocating the parties equal time and opportunity to speak and prohibition of smoking (Dhiaulhaq *et al.,* 2015).

After the rules were agreed, a fundamental requirement to successful process, the mediators facilitated the process of clarification of issues and interests. In this session the conflict parties were asked to express their interests and concerns as well as expectations. The parties were also allowed to seek clarification from other parties about their interests and concerns. This also included agreement on which issues were to be prioritized and be the focus of the mediation. In other words, community representatives were allowed to consult with other members of the community to incorporate and align their thoughts and promote acceptability of the outcome.

In Riau case for instance, the parties identified four focus matters which included the Primary Cooperative Credit for Members scheme (KKPA) oil palm estate management, certification of land, credit amount agreement borne by the villagers for the plantation development, and harvesting and delivery of fresh fruit bunches *(*Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015). Two key issues (handover of 264-hectare area of oil palm plantations and land claim of 1627 hectare and land claim for land which was already planted with acacia) were prioritized.

To achieve the identification and prioritization of issues, the mediators used either general meetings attended by all parties or separate meetings (caucuses). Certainly, this enabled the mediators to get deeper understanding of the underlying parties' interests and their best alternative to a negotiated agreement, that's the parties' best available option if the negotiation failed (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015). Also, the mediators clarified issues and

interests, including the agreement on which matters were to be prioritized and the mediation's focus, through general meetings and caucuses.

The numerous meetings resulted in agreeing on various issues, generation of handwritten agreements like in the Riau case. The common understanding of the Riau mediation's draft was then sought with the mediators' help. The parties met and discussed the consolidated agreement, with the subsequent writing and signing of the memorandum of understanding (MoU) (Dhiaulhaq *et al.,* 2015; Dhiaulhaq *et al.,* 2014).

Notably, in the case of Kanchanaburi, the mediator facilitated the participatory mapping and boundary demarcation process as one of the ways to resolve and achieve agreement on the contested boundary and land-use between villagers and the national park. This was preceded by a day's capacity building on global positioning system (GPS) and mapping for both parties to ensure inclusive participation in the process (Dhiaulhaq *et al.,* 2015). In Jambi, the mediator invited the bank representatives and the Oil Palm Company and cooperative to clarify the residents' debt incurred under KKPA scheme, including interest rates.

During the post-mediation and mediation outcomes, the mediation cases involved the execution of the deal (where the implementation plan was developed and the agreement items implemented) (Dhiaulhaq *et al.,* 2015). There is no doubt that the monitoring and evaluation of the implementation of the agreement in these mediation cases fostered peaceful relationships.

The six mediation cases in South Asia resonates the theoretical mediation processes. However, it should be noted that conflicts vary from one incident to another including in terms of geographical locations. Therefore, there is a need for continued documentation of the natural resources conflict resolution processes including in Africa to build best practices and improve

the effectiveness of mediation and the sustainability of the pacts.

2.4.6 Mediations' role in resolving conflicts

Mediation's role in resolution of natural resource conflicts is indisputable. Besides resolving these conflict for over decades, mediation has been essential in creation of long-term cooperative relationships especially in south Asia (Folger & Bush, 2015; Rokhim *et al.,* 2020; Vukovic, 2014).

The mediation of different natural resource conflicts in the cases of Chiang Mai and Kanchanaburi in Thailand, Jambi and Riau in Indonesia, and Kampong Speu and Kampong Thom in Cambodia that envisioned the transformation of the conflicts, and the attainment of sustainable resource management (Dhiaulhaq *et al.*, 2015; Dhiaulhaq *et al.,* 2014; Samsudin & Pirard, 2014), demonstrates mediation's efficacy as an ADR mechanism. In these cases, mediation supported the establishment of conducive atmosphere for dialogue between stakeholders, established trust among conflicting parties, and helped solve problems leading to mutually agreeable, and certainly the enhanced and sustainable interactions (Dhiaulhaq *et al.,* 2015).

Mediation successfully resulted in the consensual agreement in the form of a written pact for Chiang Mai and Kanchanaburi's case (Thailand) and Riau (Indonesia). The Jambi and Kampong Thom agreements in Indonesia and Cambodia were in form of the signed minutes of the parties' meetings (the Jambi case) while Kampong Speu, Cambodia mediation agreement was verbal (Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2015). Also, mediation resulted in numerous social, economic, and environmental impacts, with the social benefits being the most notable mediation impacts.

Further results included, improved understanding and relations and long-term cooperation between parties with their improved capacity to resolve conflict. Economically, the residents got more rights to manage and accrue income from natural resources. Like in the Kanchanaburi case, the villagers collected the non-timber forest products (NTFPs) from the protected area (the national park) and utilized their land for agriculture and other income generation activities without hindrance. This increased their confidence in investing time and money to grow their crops throughout the year, resulting in more sustainable income. In the case of Riau, the residents got more income from the oil palm plantation that was handed over by company as compensation. They also benefited on social infrastructure improvements gained through the company's corporate social responsibility funds.

While in the Kampong Speu and Kampong Thom cases, the Community Forest Association (CFA) members continued managing the forests and extracted the NTFPs for income generation. The companies' corporate image and reputation improved with increased profits. Also, the government's forest conservation efforts improved in Thailand's case because of mediation. This was demonstrated through perceived improvements in the quality of the forest (density and biodiversity), attributed to compliance of agreed rules and regulation on forest use.

In Kampong Speu, the villagers continued to protect their mountain forest after mediation. Also, the two community forests were officially registered and approved by the Government. While in Jambi mediation case, the villagers continued with the management of the oil palm farms which enabled employment and income generation opportunities. While the binding nature of the traditional mediation is questionable, the above recorded results of

the Indonesia mediation cases, which included verbal agreement speaks for themselves. These results validate the effectiveness of traditional mediation in resolving multifaceted natural resource conflicts.

Continentally, during the pre-colonial era, Nigeria was constituted by among others kingdoms such as the Borno Empire, the Oyo Empire, and others which were not without conflicts, yet conflicts were adequately resolved without litigation (Uwazie, 2011). This author suggested that the use of mediation as pioneer projects in countries like Ethiopia, Nigeria, and Ghana reportedly resulted in amicable resolutions, demonstrating the appropriateness of mediation in the African context. Mediation was used to address challenges associated with litigations with the allegation that there was a growing trend to formalize and popularize the use of mediation as viable to litigation.

In Ghana for instance, the mediation week held in 2003 saw the mediation of 300 cases pending in courts over five days. Notably, about 90% of the disputants surveyed expressed fulfillment with the process of mediation. The mediation pioneer projects' success saw the use of mediation in the subsequent years to successfully resolve conflicts. All District, Circuit and High Courts in Ghana had been projected to have functioning mediation programmes by 2013, with projected 10,000 mediated cases each year, and reduce the pressure on court systems in the country.

In Ethiopia, during the initial ADR project in August 2008, about 31 cases from the civil and family court dockets from the Ethiopian Women Lawyers Association (EWLA) in Addis Ababa were referred for mediation (Uwazie, 2011). During the three days of the pilot, all cases or complaints were handled by newly trained mediators, 17 of them resulting in full

settlements, six in partial agreement or adjournment, and eight returned to court or the EWLA (Uwazie, 2011).

In Nigeria, about 100 medium-scale commercial disputes were scheduled for mediation during the first mediation week November 2009 (Uwazie, 2011). Nearly 60 percent of the mediations resulted in agreement. Over 98 percent of disputants surveyed expressed satisfaction with the process, and nearly 70 percent preferred mediation to court litigation. Most of the participating lawyers also found the process satisfactory and indicated that they would recommend it to their clients (Uwazie, 2011).

The speedy resolution of disputes through mediation as recorded on the continent in countries such as Ghana, Nigeria and Ethiopia underscores the important role mediation plays in decongestion of courts and access to justice. Importantly, the satisfaction rates for mediation are significant and uncontested assurance of durability of the mediation agreements with long term relationships.

2.4.7 Mediation's challenges and lessons

While mediation has been applied successfully to resolve conflicts, the process has not been insusceptible to challenges where applied. Samsudin & Pirard (2014) reveals that mediation over the forest resources in Jambi province, Sumatra, Indonesia, had to adapt to the ground conditions, with successive mediators and over several years. This resulted in high financial costs and time, a potential threat to continued implementation of the mediation agreement especially in countries which suffer from donor driven mediation.

In the Senyerang case, the government's excessive power over the forest areas limited occupants' compensation for the land in kind (Peluso & Vandergeest, 2001; Sahide & Giessen,

2015). Thus, the Ministry of Environment and Forestry (MoEF) directed the community to accept the offered benefit-sharing arrangement with the plantation. Whereas the community had to live with what they were offered, courtesy of the power disparities, forest management is likely to suffer from the lack of ownership by the community in retaliation, with the potential to compromise the gains already made.

Translation of agreements into action was a cross-cutting challenge in most mediation cases in South Asia (Dhiaulhaq *et al.,* 2018). Such was the case in Samba mediation, where instead of what was bargained for, the smallholder oil palm estate erected substandard quality roads. Yet, the inhabitants had to repay the loans used for their construction. Also, displeasure was prevalent in Kuantain Singigi and Tanjung Jabung Barat mediation cases in Indonesia (Afrizal, 2015), although the community accepted the mediation agreement. However, why would the developer fail to honor pledges? This boils down to possible dishonest in negotiations perhaps to quickly win the community support. Yet a threat to mediation agreement. Transparency and accountability becomes important principles in mediation that would also promote trust and sustainability of the mediation results.

In Africa, mediation has often been donor-driven since most governments are unable or unwilling to appreciate it (Uwazie, 2011). Generally, the lack of political goodwill weakens the institution's building that spurs human resources development and the formation of enabling legal framework. Also, mediation is a potential threat to the income for lawyers who benefit from conflict litigation. The majority of the public is poorly informed of mediation as a legitimate method for resolving natural resource conflicts.

The mediation resolutions can be forced on warring parties because of lack of legal framework, thus the non-binding nature of a mediation agreement (Muigua, 2019b). Actualization of the mediation agreement relies on the parties' goodwill. The process can be endless and time-consuming, with the unfair outcome due to power imbalances (Fiss, 1984; Muigua, 2016). Mediation may not be suitable when one party needs urgent protection like an injunction and hence viewed against litigation as a demerit. Besides, legitimacy issues when powerful and important actors are left out of the process for one reason or another are also inevitable with mediation. Mediation faces challenges of policy issues, which are inadequate and lack of prioritization of mediation by many African States, as a means of conflict resolution, thus the small budgetary allocations (Muigua, 2016; Uwazie, 2011).

2.5 Research gaps

Renewable energy development worldwide demonstrates global efforts towards cutting down on carbon footprints and address climate change. However, evidence (Schade, 2017; Temper *et al.*, 2018) points out the installations of renewable energy facilities as an example of developmental projects eliciting conflicts with the local communities, with unthinkable consequences. Yet, the dynamics of these conflicts remain poorly understood (Murillo-Sandoval *et al.*, 2021; Unruh *et al.*, 2019), and improperly managed. Either, scholars (Pellizzone *et al.*, 2017) observe that geothermal energy acceptance is growing globally. However, its acceptability remains highly differentiated, requiring site specific studies.

Whereas there is an increased scholarly work documenting the mediation processes and its increased use and effectiveness in managing natural resource conflicts, most of the studies are skewed towards South Asia (Dhiaulhaq *et al.*, 2018; Dhiaulhaq & Bruyn, 2014; Dhiaulhaq *et al.*,

2015; Rokhim *et al.*, 2020; Yurdi *et al.*, 2010). The available scholarly work in Kenya, (Ambole *et al.*, 2019; Juma, 2009; Muigua, 2017) is incomprehensive in terms of documentation of practical mediation processes and evaluation of these processes and mediation's role in resolving natural resource conflicts.

Further, the success of mediation has been recorded in many countries, including Ghana, Ethiopia, Nigeria, and also Indonesia (Bourdier, 2019; Dhiaulhaq *et al.*, 2018; Dhiaulhaq *et al.*, 2014; Uwazie, 2011). However, the results of mediation in these countries may not be applicable to Kenya, considering the nature and the dynamics of conflicts, and mediation processes vary from case to case (Bercovitch & Sigmund, 2006; Dhiaulhaq *et al.*, 2014; Dhiaulhaq *et al.*, 2015). Thus, site specific studies are needed.

Most of the available studies on mediation's use in resolving natural resource conflicts are limited to qualitative research (Dhiaulhaq *et al.*, 2014, 2015). This study sought to incorporate quantitative assessments to enrich the results.

2.6 Theoretical framework

2.6.1 Vested interest theory

Vested interest theory (VIT) was established to shade light into the influence of VI on attitude and behavior consistency (Crano, 1995; Lehman & Crano, 2002; Sivacek & Crano, 1982), of different actors. The application of VIT in different disciplines is growing globally as also observed by (Johnson *et al.*, 2014). Scholars such as Godinez (2018) used the theory to identify the vested interest of the United States and/or any global power, in a foreign electoral intervention. Siegel et al. (2019) applied the VIT to the prevention of non-medical prescription stimulant and marijuana use, and Miller et al. (2013) used the theory in their study with the aim

of advancing an effective vested interest scale for evaluating the awareness of an individual and "vestedness," germane to disaster preparedness.

Johnson *et al.* (2014) states that vested interest theory categorized individuals as highly vested if the attitude object affected directly the attitude holder. (Moe, 2015) defines vested interests as, interests held by certain actors and/or actors themselves as they pursue those interests. Vested interest's definition has been expanded to include circumstances in which individuals are indirectly affected by the issue under consideration (Johnson *et al.,* 2014). The vested interests have been linked to their potential to influence actors' attitude or actions in diverse contexts including in utilization of natural resource such as geothermal.

In this study, the vested interest theory was used to demonstrate how different interests of the different actors involved in the implementation of Olkaria IV geothermal project, influenced their actions leading to a conflict. Fenn *et al.* (1997) suggests that conflicts often emerge as a result of incompatible and vested interests of the involved actors. Schnaiberg *et al.* (2002) categorizes such parties into the State, the producers and consumers. The parties in this study included the government of Kenya (the State), Kenya Electricity Generating Company (KenGen) as the Producer, and the Olkaria IV community as Consumers who were involved in a conflict with KenGen over disparate vested interests related to the Olkaria IV geothermal well site.

According to Schnaiberg *et al.* (2002), the State plays a twin role. Firstly, the State supports the accretion of capital, and development for the benefit of the nation implemented by its diverse institutions like KenGen. In Olkaria IV, the government's interest was to intensify investment in geothermal energy as part of its commitment to increase the supply of electricity

and production of green energy towards meeting its goals for climate change mitigation. As the Kenyan government already had other production wells on this site, this meant that it had strong vested interests in developing further wells where production infrastructure already existed.

Secondly, the State is also obligated to protect the rights of its citizens living in the local community which is affected by development projects through environmental laws. This provides for an assessment of the potential impacts of geothermal projects, and the subsequent resettlement of the community within the project vicinity, to protect them from these impacts. Thus, in case of Olkaria, the community was moved from Olkaria IV site to allow KenGen expand geothermal production. This action was informed by the results of environmental and social impact assessment (ESIA) study which, demonstrated that the project would have potential negative impacts on the community (KenGen, 2010; Schade, 2017). After negotiations, the community reluctantly agreed to be relocated to a piece of land near the project site. Whereas, the proximity to the project site would have enabled the community to secure temporal/casual jobs, the land had poor quality forage for their livestock.

The land in question had volcanic ash soil type that was allegedly prone to erosion and quick formation of gulleys. However, the community wished to keep their traditional land which, they found hard to disassociate from. The community had invested in their cultural activities and village life, whose value was difficult to calculate in monetary terms and hard to compensate.

In addition, it was a challenge to transfer cultural activities, including the performance of traditional dances to tourists, and the trade in traditional ornaments and other items from Olkaria IV site, which is located inside a wildlife park, to the new site. The resettlement area is outside this park, cutting off the community from the hub of tourism activities within the park. This was

compounded by the additional transport costs which the community has to shoulder to get to the park.

While resettlement site came with permanent houses, unlike the semi-permanent houses at Olkaria IV, these improved standards failed to satisfy the project affected persons' (PAPs) cultural value for *manyattas* (traditional huts*)*, and the disadvantage of removal from proximity of Olkaria IV, where both cultural activities and other income generation activities contributed to their livelihoods. Furthermore, they lost their easy access to the market and town centres including, Naivasha where some of their livelihood activities had previously taken place.

The competing interests exhibited by these actors were therefore, the epitome of detrimental conflicts. While the community had to relocate to a less suitable land than the one, they had left, because of cultural and livelihood aspects, KenGen needed this land for power production. Thus, the conflicts persisted because the PAPs had a vested interest in continuing to reside on their traditional lands due to the easy access to markets that it provided, the better terrain and the community's *manyattas* which, were better suited to their needs. In this regard, the study sought to provide a better understanding of the dynamics of conflicts that arouse from the installations of the geothermal project in Olkaria IV with a view to identifying lessons for their proper management and sustainable development of larger projects in the country.

2.6.2 The Noll Theory of Mediation

The Noll theory of mediation puts emphasis on mediation as a method of conflict resolution (Noll, 2001). This theory provides a basis for explaining the appropriateness of using mediation in resolution of conflicts, making it preferable to adjudication and arbitration. In legal adjudication, a competent authority decides in favor of one person at the expense of the other,

resulting in a win-lose situation. Legal decisions fail to accommodate reconciliation, and persons who result to the law live with hurt relationships. Whereas, the resolution reached in arbitration is a compromise of what the law would award, reducing its bite, there are still winners and losers.

Mediation is a more progressive approach that enables satisfaction and builds relationships. The Noll theory of mediation considers the nature and dynamics of a conflict which, promotes reconciliation and justification of all deviating views of practice and outcome into a unified view of mediation. Mediation is a conflict resolution process that transforms a conflict with the help of the a mutually agreed upon and impartial third party who has no authority to impose a solution (Bush & Folger, 2005; Moore, 2014; Nwazi, 2017; Vindeløv, 2012). The mediator may propose alternatives and possible solutions throughout the process but, they cannot impose the solution (Wall *et al.,* 2011). There is a measure of give and take for the parties to reach the decision. In other words, the parties must provide as much ground as acceptable for them to live with the decision. The feeling that they make the decision enables them to deal with any hurt arising from a conflict and making an effort to live with the decision. Thus, it heals a relationship.

In line with the Noll theory of mediation, KenGen and the PAPs in Olkaria IV's case, sought resolution of the conflicts that threatened their relationship and smooth implementation of the geothermal project through mediation. The process considered dynamics of conflict that led to reconciliation. The disputes arose because parties had different interests and positions over the geothermal well site at Olkaria IV. Through KenGen, the government needed the land to expand geothermal production to attain its commitment to increase electricity supply and mitigate

climate change through the production of green energy. The government had the legal right to compulsory takeover of the land, based on the greater public good. However, it was mandated with responsibility of community welfare, and protecting it from the potential negative impacts arising from the project, thus, the PAPs were relocated from the Olkaria IV site to the alternative land.

The community, on the other hand, wished to keep their traditional land. It had invested in the cultural activities and villages; whose value was hard to calculate and compensate in monetary terms. The community felt it had ancestral rights to the land and also livelihood interests attached to it. They invested in generating income-generating cultural activities, including traditional dances and trade in conventional ornaments and other tourists' items. These activities were not easily transferable from the Olkaria IV site, located inside a wildlife park, to the new site, far from it. The community was cut from the hub of tourism activities aggravated with additional transport costs to the park.

Each party could have considered that they stood on the high ground and could win a legal battle. Instead, in the spirit of mediation, the government and the PAPs agreed to negotiate relocation to allow KenGen to continue implementing the Olkaria IV geothermal plant project. The mediated agreement may have been deemed expensive, but KenGen may have considered it a small price to pay for the project's smooth implementation.

Studies reveal that mediation's outcomes can be affected by factors including the nature of conflict, the personality of the mediator and mediation's process (Bush & Folger, 2005; Dhiaulhaq *et al.,* 2014; Gritten *et al.,* 2009; Kressel, 2006; Wall *et al.,* 2001). In this case, the study sought to better comprehend the Olkaria IV conflict mediation process through contacting affected

persons and appraising its documentation. The study also evaluated mediation's effectiveness in resolving the disputes that arose from the projects' implementation.

2.7 Conceptual Framework

Local communities, especially in dry areas like Olkaria are mainly dependent on natural resources like pasture for livestock. In addition, natural resources in the area include those that the community does not use, like geothermal resources, which are essential for electric power production (Figure 1).

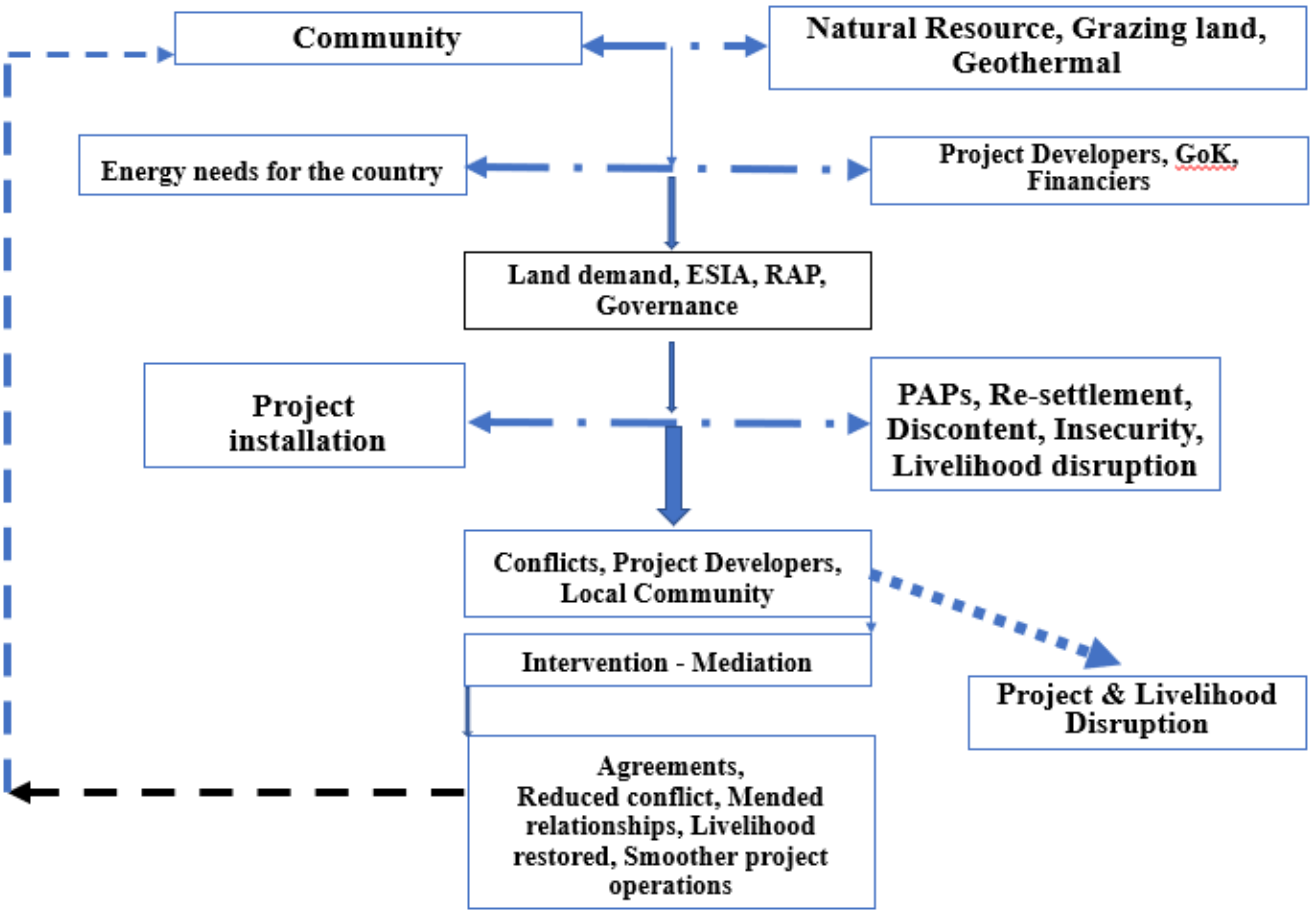

Figure 1: The implementation of mediation in development project conflict, (Authors, 2018)

Geothermal resources in Olkaria IV attracted different stakeholders. These included, the Government of Kenya and energy developer (KenGen), who invested in land for production of the energy needs for the country, and meet the State's global commitment on climate mitigation, and the European Investment Bank (EIB) and World Bank (WB) among other international financial institutions which, supported the project. This created increased land demand competing between the local community and power production; thus, the issues of vested interests became essential.

To ensure the protection of the natural environment and social dynamics, the Olkaria IV geothermal project was subjected to environmental and social impact assessment (ESIA). The study established potential health impacts on the project affected persons (PAPs). A Resettlement action plan (RAP) was developed and the PAPs were relocated to protect them from the negative impacts associated with the operation of the geothermal plant.

However, during project installation, RAPs' implementation was associated with the disruption of the community and governance issues triggering conflict between KenGen and the community that almost derailed project's implementation. The community was discontent following perceived unfair compensation, disruption of their livelihoods, and their inadequate participation in decision making processes. The project financiers (EIB and WB) recommended mediation that resolved the issues, thus promoted compliance with legal requirements.

Mediation resulted in reaching a consensus on thorny issues by KenGen and the PAPs, and signing of the agreement. The mediation reduced conflicts, mended relationships between KenGen and PAPs, restored PAPs' livelihoods and oiled project operations with anticipated continued interaction of the community with sustainable management of the natural resources.

CHAPTER THREE: GENERAL MATERIALS AND METHODS

3.1 Description of the Study Area

The research was conducted at the RAPland in the development area of Olkaria IV. RAPland comprises of 155 households with a total population of 1209 PAPs (GIBB Africa, 2012; Schade, 2017) situated in the Olkaria geothermal block in Naivasha-Sub-County, Nakuru County (Figure 2). Gazetted as a Geothermal Resource Area in 1971, the geothermal field is located in the Hell's Gate National Park (HGNP) on KenGen's land covering about 80 square kilometers (sq. km) (Sena, 2015). The Park lies at 0°54′57″S, 36°18′48″E, to the south of Lake Naivasha which is about 120 km north-west of Nairobi.

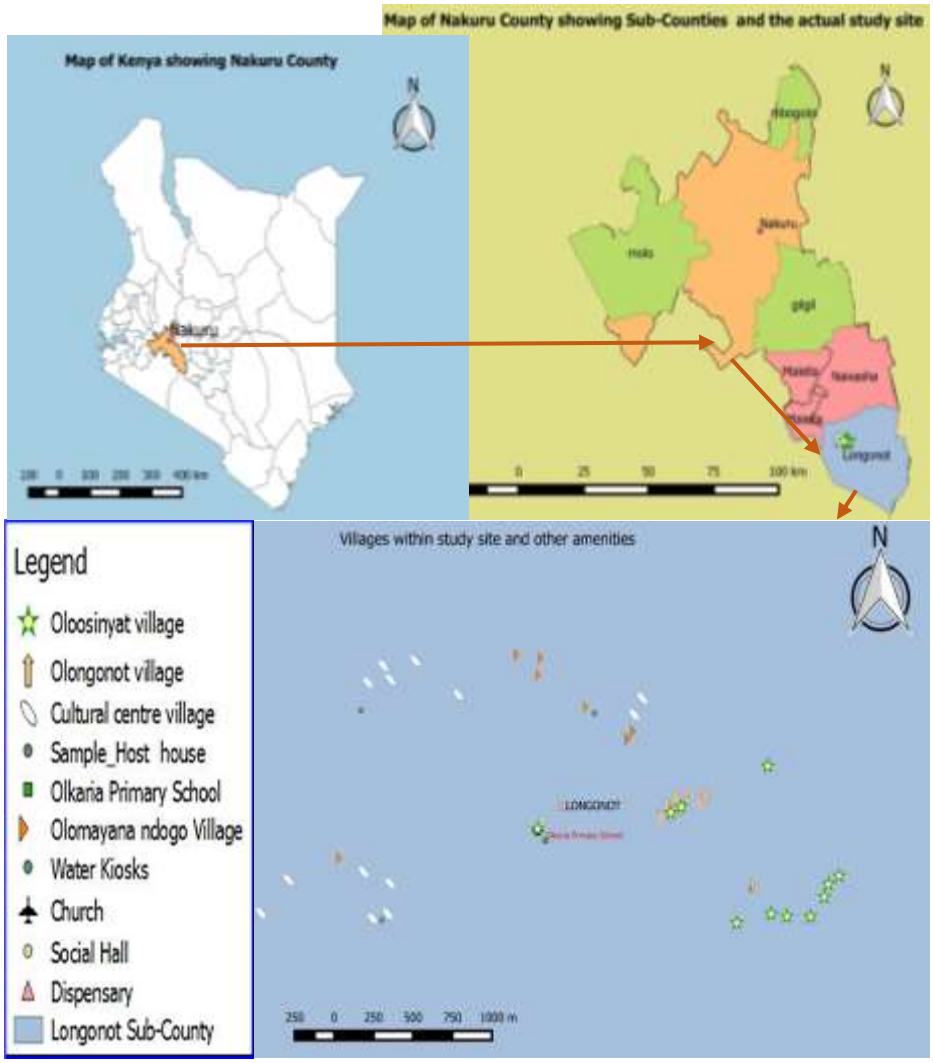

Figure 2: Location of Study site, RAPland at Olkaria IV in Lolongot. Source: (Authors, 2019)

The exploratory drilling of geothermal energy was deemed suitable on Olkaria field after a study conducted in 1970 by the United Nations Development Programme (UNDP) and Kenya Power and Lighting Company (KPLC) (Ouma, 2009; Schade, 2017). The Olkaria geothermal field hosts five power plants (EPRA, 2020, 2021; Renkens, 2019). These include Olkaria I, II, III, IV, and V commissioned in 1981, 2003, 2009, 2014 and 2019 respectively,

with plans to construct Olkaria VI and VII (Koissaba, 2018; Renkens, 2019). Olkaria IV power plant has an installed capacity of 140 Megawatt (MW) owned and managed by KenGen. The Project was established with the financial support of the Government of Kenya (22%), the European Investment Bank (EIB, 12%), the Japan International Cooperation Agency (JICA, 23%), the French Development Agency (AFD, 15%), the German Development Agency (KfW, 7%), the World Bank (7%) with KenGen providing 14% (Abad, 2015; Schade, 2017).

The development of Olkaria IV necessitated the relocation of four villages inhibited by the Maasai community including, Cultural Centre, OlooNongot and OlooSinyat and OlooMayana Ndogo. GIBB Africa, a consultant firm was contracted by KenGen to develop a Resettlement Action Plan (RAP) to facilitate the resettlement process. The PAPs were resettled on 1,700 acres (GIBB Africa, 2009; KenGen, 2010; Schade, 2017) upon which they were to get title deeds, modern infrastructure, social services and grazing land.

3.1.1 Climate

Olkaria area has a semi-arid climate type. The Olkaria domes area lies at the Rift Valley's base which sees it experience higher temperatures than the adjacent highlands (KenGen, 2010). Naivasha sub-county lies 1,829 m above sea level. The area records minimum temperatures range from 11.4^{o}C to 16.6^{o}C whereas the maximum temperatures range from 25.4^{o}C to 35.5^{o}C. The average temperature for the area is 18.4^{o}C, with February being the warmest month, and June/July the coolest. Night-time temperatures are occasionally frosty, and mid-afternoon temperatures very hot. Winds are generally South-easterly, except in February to April, when they tend to have a noticeable North-easterly component (Barasa *et al.*, 2018; KenGen, 2010).

Relative humidity of the study site averages 69.6%. The movement of inter-tropical convergence zone governs the monthly distribution of rainfall in the area hence resulting in a bimodal pattern of rainfall distribution with March, April and May experiencing long rains with short rains in October, November, and December. Rainfall is however; usually lower with an average of 634mm per annum. The area also experiences double rain shadow effects from the West and East flanking escarpments; the Mau and Aberdare Range/Kinangop respectively. The area experiences evaporation that exceeds precipitation almost throughout the year. This ranges from about 1700mm per annum at the lake to approximately 1000mm per annum on higher grounds. Lake Naivasha maintains its water levels by receiving inflow from the Malewa River in the east, as well as from the Karati River, Gilgil River and groundwater during the rainy season.

3.1.2 Soils

Soil types in Olkaria' and the surrounding area differ extensively in depth, texture and chemical properties largely influenced by the area's geology (Barasa *et al.*, 2018; KenGen, 2010). The Naivasha area's soils can be broadly categorized into the soils developed on volcanic rock materials and those developed on the sediments of the lake bed. The previous soils are derived from mixed assemblage of acid and basic lavas while the lake sediments are composed of a mixture of volcanic ash, reworked volcanic material and autochthonous organic matter can broadly be classified into two distinct types namely lacustrine (lake sediments) and volcanic, both of which are quaternary deposits. The Olkaria volcanic complex is characterized by comendite lava flows and pyroclastics on the surface and basalts, trachytes, and tuffs in the subsurface (Thompson & Dodson, 1963). The litho-stratigraphy of the Olkaria geothermal area as revealed by data from geothermal wells and regional geology can be divided into six main

groups: Proterozoic ‘basement’ formations, Pre-Mau Volcanics, Mau Tuffs, Plateau Trachytes, Olkaria Basalt and Upper Olkaria volcanics.

3.1.3 Topography

The Olkaria IV area including Lake Naivasha and environs, is located at the floor of the Great Rift Valley. The Lake Naivasha basin covers about 3,400 km^2 while the lake itself stands at around 1,885 meters above sea level (masl). On the west of the lake basin is the Mau Escarpment (3,080 masl), and the Olkaria and Longonot mountains to the south and south east. The lake basin is bound by Kinangop Plateau to the East, the Nyandarua (Aberdare) Range (3,900 masl) to the north and north east while Eburru volcanic pile borders the western side of lake basin. The general topography is characterized by a wide range of features associated with volcanic activity. This includes craters, remnants of pre-existing craters, fault scarps, fissures and steam jets. The area surrounding the location of study area comprises volcanic features that consist of steep sided domes formed from pyroclastic rock and lava flows (Barasa *et al.*, 2018; KenGen, 2010).

The domes enclose an approximately circular depression cut by the Ol Njorowa Gorge, which was formed by out flowing water from Lake Naivasha. Within this complex, there are several small valleys that drain the upper slopes and discharge runoff and sediments to the foot slope and the plains below. To the north of Olkaria, the topographical features are dominated by depressions of four tower bodies including the Crescent Island, the main Lake, Lake Oloiden and Crater Lakes. Also, the area is characterized by rugged terrain with deep gullies and alternating ridges, which are highly eroded with scanty vegetation. The dominant soil is unconsolidated volcanic ashes and intercalation of rocks in areas of high erosion. Valleys that have active

erosion are bear with rock exposed in steep areas and deposits in low areas. Some gullies are dormant and have since regenerated and colonized by vegetation. Erosion is common in areas with anthropogenic activities such as geothermal wells.

3.1.4 Geology

The surface geology of the Naivasha and Olkaria area is dominated by comenditic lavas, pumice fall and pyroclastic. A large fraction of the pumice fall and pyroclastic deposits is hypothesized to have originated from Longonot and Suswa volcanoes, lying immediately 20 km east and 40 km south of Olkaria Volcanic Complex, respectively (Omenda, 1998). Most of the comenditic rhyolite extrusions of the present area are confined to an irregular area which curves around the south-western shores of Lake Naivasha. Other rhyolite craters and plugs are scattered along a line roughly parallel with the Ol-Njorowa Gorge (Clarke, 1990). The rhyolites are younger than the comendites and may represent a later phase of volcanism involving a common parent magma. Much of the pumice in the area is probably of normal rhyolitic composition, and it is known that some of the most recent phases of volcanicity have been pumice ejection. On the western banks of Lake Naivasha a few small lava flows are composed of much more compact bluish grey, slightly vesicular basalt with fairly abundant but small plagioclase phenocrysts. Texturally-similar basalt forms an isolated outcrop in the Kinangop escarpment, Pardoe and Schuster's farm (Clarke, 1990).

3.1.5 Flora

The Olkaria IV (Domes) area and the surrounding including the entire HGNP is characterized by grasses, herbs, shrubs, scrubs and a few trees, upto 20m in height, whether open continues

canopy or not (Barasa *et al.,* 2018; KenGen, 2010). The area is covered majorly by the *Hyperrhenia, Digitaria, Themeda* grasses, *Tarconanthus camphoratus* and Acacia *xanthophloea* trees which are about 35m tall. Other species of shrubs and trees included: Acacia drepanolobium (which is mainly where the water table is high), Rhus natalensis and cussonia holistii (Barasa *et al.,* 2018; KenGen, 2010). The degraded areas, gully floors, well pads, access roads and eroded areas are dominated by the invasive plant species. These included Solanum incunum, Datura stramonium, Hypoestes Forskaolii and Sida tenuicarpa among others. The woodland vegetation is rare is this area.

3.1.6 Fauna species

Located in the HGNP, Olkaria area and other surrounding environments support twenty-three species of mammals including small mammals, large herbivores, and a host of small herbivores. Most common animals include the Eland (*Taurotragus oryx*), Steinbuck, Klipspringer (*Oreotragus oreotragus*), Waterbuck, the common Zebra (*Equus burchelli*), Kongoni (Acelaphus buselaphus), Gazelles (*Gazella thomsonii* and *Gazella grantil*), Impala (Aecpyceros melampus), Dik dik (Rhyncotragus kirkil), African giraffe (Giraffa came/pardis), leopard (*Panthera pardus*) and African buffalo (*Syncerus caffer*) among others. The Jackal, Olive baboon, Rock hyrax, Hedgehog and Aardvark are also common species found in the Hell's Gate environment (KenGen, 2010). The park's beautiful scenery includes the Fischer's Tower, Central Tower columns and Hell's Gate Gorge.

3.1.7 Avifauna

Due to its proximity to Lake Naivasha, the project area has a variety of Avifauna, some of which

are threatened. This however is not being treated as stand-alone, and is related to the entire HGNP, Mt Longonot National Park and the adjacent ranches. HGNP is known to harbor Kenya's only national protected nesting colony of Critically Endangered Rüppell's Vultures (*Gyps rüeppellii*) that typically contains 19 nests per year on a cliff face (Barasa *et al.,* 2015). The Critically Endangered White-backed Vulture (*Gyps africanus*) which is critically endangered and the Near Threatened Grey-crested Helmetshrike (*Prionops poliolophus*) as per the IUCN red list of threatened species are found in HGNP. There are over 100 other bird species recorded inside the park; many thousands of swifts roost and nest in cracks on the cliffs (Barasa *et al.,* 2015). The gorges found in the park are also important breeding grounds of some of the bird species. The Park is listed by Nature Kenya as Important Bird Area (IBA) due to its variety of bird species of conservation concern.

3.1.8 Herpetofauna

Herpetofauna (reptiles and amphibians) play a key ecological role in regulating population of other species through predatory and herbivory. About 30 species of herpetofauna were recorded in Olkaria area during baseline ecological survey conducted by (Gibb Africa, 2014). The species comprised of 15 types of snakes, where three of these species, including the African Rock Python found within the gorges and valley bushlands, occurred at the site (KenGen, 2018). The survey confirmed and documented two species of tortoise and three species of lizard out of six known from the area. According to Gibb Africa (2014), the herpetofauna is very sensitive to habitat alteration particularly the frogs living in fresh water while the snake and tortoise' breeding are mainly threatened by the surface run-off (Gibb Africa, 2014).

3.1.9 Invertebrates

Gibb Africa (2014) documented about 30 kinds of invertebrate within six order and 18 families at Olkaria area during its field study. Invertebrates play vital role in the ecosystem. They largely contribute to the sustenance of vegetation cover through pollination of plants. Most of the invertebrates are extremely sensitive to alteration of the habitats, thus play are good indicators of environmental degradation. Their loss from an area would result into loss of the ecosystem functions they facilitate (KenGen, 2018).

3.1.10 Cultural Profile

The project site's cultural environment is largely influenced by the Maasai Community living in this area (KenGen, 2010). They depend on livestock (cows, goats and sheep) as their main source of their livelihoods (KenGen, 2010). The settlers graze the vast terrain which has provided pasture for their animals since antiquity. The Maasais have resided in this area for many decades. They have exclusive land-tenure system, with permanent residential homes referred to as '*Embarnat,'* where they reside in large communities (KenGen, 2010). However, should these permanent locations dry up resulting in scarcity of pasture, some of the Maasai community move out of the '*Embarnat,'* in search of pasture elsewhere as long as a year and return when animal pasture is restored in their previous grazing grounds (KenGen, 2010). The temporary nomadic residences are known as '*llgobori'* or '*Emuate*.'

Also, the Maasai community is dominated by numerous cultural activities including circumcision, naming ceremonies, weddings, funerals, religious observances and sacred rituals (KenGen, 2018). The cultural activities are accompanied by traditional songs and dances. The

Maasai cultural centre is located close to Olkaria I geothermal power plant, about 10 km away from the proposed project site (KenGen, 2018). The centre has been set aside by the Olkaria IV PAPs for showcasing the Maasai culture and traditions hence earning income. There are no known or gazetted archaeological, historical or cultural sites near the proposed power transmission line route (KenGen, 2018).

3.2 Research Design and Materials

3.2.1 Research design

The study employed a mixed methodology to gather qualitative and quantitative data. Qualitative research approach was used to a large extent on key informants and in focus group discussions. Attempts were also made to collect qualitative data through open ended questions in a questionnaire that was administered to households at RAPland. Qualitative research enables comprehensive understanding of the respondents' views regarding the subject under investigation, and also enables the researcher's access to information on complex issues like conflicts (Hong *et al.*, 2018; Silverman, 2011).

In this study, this qualitative approach was important to gather respondents' reflection on conflict dynamics, mediation's inception, and stakeholders involved, the mediation process, issues mediated, and the outcome of the mediation. Also, the qualitative method used secondary sources such as peer-reviewed journals, books and reports on the large-scale developmental projects, including geothermal power plants, their conflict dynamics and conflict resolution, globally and locally.

Quantitative research emphasizes on quantification in data collection (Brannen, 2000).

In this case, quantitative research approach was limited to the description of the respondents' demographics. This was attained through the use of close-ended questions in household survey that sought to gather respondents' information such as the age, marital status, and level of education and livelihood activities. The study also collected the number of participants involved in different processes. This included, the number of respondents who participated in resistance to relocation, the mediation team and the issues mediated.

A reconnaissance study was conducted in May, 2019. During this visit, the researcher met with seven potential research assistants identified through the help of the two contact persons from RAPland. The researcher with the support of one of the Mediator's, held a meeting with the team at the KenGen's Staff Club in Olkaria, where the research objectives were shared. Four research assistants comprising of one female and three males were recruited. Two of the research assistants had attained High School/Secondary education or equivalent, one Bachelor's degree, and the other Master's degree. The research assistants were trained on the varied questionnaire's features and interview procedures and etiquette. They were facilitated with the note books, pens, flip charts and the strings.

3.2.2 Sampling

The study employed a census or a complete enumeration. Although a census is expensive, especially where large populations are involved, it's use in a small population help to avert sampling errors, and enable incorporate input from the entire population. The sampling of the entire population in a small populations helps achieve the level of precision required (Singh & Micah, 2014).

In this light, this study targeted the entire population relocated to RAPland

comprising of 155 households. These PAPs were resettled in four villages including Cultural Centre, OlooNongot, OlooSinyat, and OlooMayana Ndogo. The goal was to record the experiences of the individual households on the Olkaria IV geothermal project conflict dynamics, their reflection on initiation of mediation, its process, parties involved, issues negotiated, results, mediation challenges and lessons. However, the study surveyed 117 households, 24 homes were not occupied by the time of the study. Its occupants had temporarily moved out of RAPland in search of greener pastures. The inhabitants of 14 more households were also inaccessible, purportedly because of work-related engagements outside RAPland.

3.2.3 Data Sources

Secondary data were obtained from reviews of published and unpublished literature from varied local, national and international sources. These literatures were related to natural resource conflicts and their resolution. The results from the reviews were used to supplement primary data gathered on conflicts that arose from the installation of Olkaria IV geothermal plant in Kenya, mediation and its role in resolution of these conflicts. The data was collected via household surveys, focus group discussions (FGDs), key informant interviews, participant observations and photography.

3.2.4 Data Collection

3.2.4.1 Household Survey

The semi-structured questionnaire was developed to gather respondents' insights on conflicts that arose from implementing Olkaria IV geothermal project, and the inception of mediation, its

process and role in resolving these conflicts. The questionnaire was systematically administered to household heads and in their absence, on dependents aged 18 years, and above to collect quantitative and qualitative data in the four villages. The collected data was complemented by information collected from the focus group discussions (FGDs), key informant interviews, field observations, and literature review.

3.2.4.2 Focus Group Discussions

The questionnaire survey results were used to prepare a checklist guide that was used to collect qualitative data via three FGDs. The groups consisted of eight participants (elders, women and youth) each drawn from the four villages. The youth group consisted of four female and four male participants who actively participated in the discussions. The female elders were separated from male to facilitate free participation and discussion, especially among women, whose culture forbids from speaking openly among men (Hodgson, 1999; Onyima, 2019). The FGDs participants were purposively selected based on their ability to input on conflict dynamics, mediation's inception, stakeholders involved, the mediation process, issues mediated, and the outcome of the mediation. The participants granted consent to record the discussions.

3.2.4.3 Key Informant Interviews

In-depth interviews were conducted with eight informants (5 males and 3 females), to generate further qualitative data. Whereas, Creswell (2012) observes that its usual to interview a few individuals in a qualitative research, (Legard *et al.*, 2003) maintains that the sample size is usually small since the phenomena need to occur once, should it be part of the analytical map. While data saturation could happen within the first 12 interviews as rightly put by (Guest *et al.*,

2006), this study purposively selected the eight key informants based on their ability to inform a deeper understanding of how the project was initiated, the arising conflicts, the mediation process and its sequels. Importantly, these informants were part of the mediation used to resolve post-relocation conflicts, and represented different parties at the negotiation tables. They included one mediator, two informants from the complaints group, two from the Resettlement Action Plan Implementation Committee (RAPIC), two village elders, and one informer from KenGen. The interviews were conducted with the aid of a checklist designed in advance. None of the participants gave their consent to be voice recorded. However, meticulous notes were taken.

3.2.4.4 Field Observation

The researcher made observations of the RAPland's landscape, the infrastructure and facilities established and the households' livelihood activities. The photographs were taken and research assistants were engaged through informal talks to supplement the information collected.

3.2.5 Data analysis

3.2.5.1 Quantitative data

The completed questionnaires were perused for adequacy and clarifications. The quantitative data that had been collected using closed-end questions covering the respondents' demographic characteristics, communication on Olkaria IV geothermal project, participation in project resistance, the mediation team and the issues mediated, was organized in an Excel spreadsheet. These data were imported into the R program (Gentleman, 2008), and analyzed using a combination of descriptive statistics, including percentages and frequencies.

3.2.5.2 Qualitative data

Qualitative data on respondents' reflection on dynamics of conflicts, genesis of mediation, its processes, results, challenges and lessons as summarized in gathered through household survey open-ended questions, FGDs and KIIs notes were typed up, and the interview recordings transcribed. The transcribed data were imported into qualitative research software, NVivo (Bazeley, 2013) for coding and content analysis through deductive and inductive approaches.

Deductive and inductive coding were applied where extracts from the qualitative data were classified into established themes to enable gain a deeper understanding of the data. Deductive coding involved the development of codes based on research questions to enable focused and objective analysis. These codes included, project information, community reaction to information, nature of resistance, conflict management and the mediation process among others. This was followed by reading of data, and assigning of passages to the respective predetermined codes. In inductive coding, codes such as conflict types, specifically socio-economic, environmental, cultural and political were established through reading of data. Data were displayed using illustrations, graphs, figures and tables.

3.2.5.3 Summary of data types and analysis methods

Table (1) below provides a summary of key thematic areas, research questions, expected results, variables and methods of data analysis.

Table 1: Summary of data types and analysis methods

Thematic area	Research Questions	Expected/Aim of Results	Variables	Method of Data Analysis
Demographic characteristics	What are your demographic characteristics?	Appraise PAPs' capacity to understand the project, & appreciate relocation consequences on livelihoods	Age, gender, household size, level of education, marital status, livelihood activities.	Descriptive statistics (frequencies & percentages)
Project communication	How and what did you learn about the Olkaria IV project?	Evaluate PAPs' knowledge of the project & its effects	Sources of project information and its benefits and negative effects	Descriptive statistics (frequencies & percentages), Content analysis (deductive & inductive approaches)
Project reception	What was your reaction towards project?	To appraise the acceptability of the project by the PAPs.	PAPs reaction towards the project & the reasons	Descriptive statistics, Content analysis
Conflict types	Did you feel like resisting the relocation? If yes, why?	Assess PAPs feelings regarding the project and reasons behind the same	Socio-economic, environmental, cultural and political concerns	Descriptive statistics (frequencies & percentages), Content analysis
Conflict nature & manifestation	What was the nature of resistance?	A description of conflict between the parties	Manifestation and expression of discontent by PAPs	Content analysis
Conflict effects	How did resistance process affect your household?	Evaluate project acceptability consequences on PAPs	Negative and positive effects of conflict on the PAPs	Content analysis
Conflict management	How did KenGen/actors react to your resistance?	Appraise conflict management strategies used	Conflict management approaches applied/implications	Content analysis
Genesis and awareness of mediation	Had you heard of use of mediation before the 2015 mediation? Source? What?	To appraise knowledge of mediation among the PAPs	Awareness and use of mediation in the community	Descriptive statistics (frequencies & percentages), Content analysis
Mediation processes	How was mediation conducted? When? How, Who? Duration?	To document and appraise the mediation process	Pre-mediation/mediation/post-mediation activities & results	Content analysis, Descriptive statistics
	What issues were mediated & the results of mediation?	Appraise parties' concerns & extent to which they were resolved	Socio-economic and environmental aspects & positive & negative results	Content analysis, Descriptive statistics
	Communication of mediation feedback	Evaluate mediation feedback & participation among PAPs	Communication arrangements and participation by the PAPs	Content analysis
Process appraisal	What did you like about mediation?	To appraise mediation's best practices	Mediation's best practices and effectiveness	Content analysis
	What were mediation process challenges (if any), and how were they addressed?	Appraise PAPs acceptability of results and sustainability of the agreement	Mediation process' procedural concerns & resolutions	Descriptive statistics (frequencies & percentages), Content analysis
	What lessons can you learn from mediation?	Appraise mediation's effectiveness/acceptability	Arrangements for improving mediation	Content analysis

CHAPTER FOUR: VARIETY AND MANAGEMENT OF DEVELOPMENTAL CONFLICTS, THE CASE OF OLKARIA IV GEOTHERMAL PROJECT, KENYA[1]

4.1 Abstract

The development of geothermal energy installations generates varied conflicts in Kenya that often escalate because of improper management. Yet, the developmental project conflict dynamics remain poorly understood. To better understand the dynamics of these conflicts, quantitative and qualitative data were collected from the Olkaria IV project-affected persons (PAPs) household heads using questionnaires, focus group discussions and key informant interviews. The cleaned qualitative data was arranged into socio-economic (51%), cultural (14%), environmental (21%) and political (14%) themes and proportions of respondents within each theme calculated. The triggers for the conflicts included inadequate communication and participation in decision-making, unsatisfactory relocation logistics, and unfulfilled compensation promises. The effects of the conflicts on the PAPs were severe. The conflicts were managed mainly through competition (31%) and avoidance (27%) strategies. Subsequent dissatisfaction on the part of the PAPs led to unrest that almost derailed the project. Planners need to be inclusive of the local community in the design of large development projects. Inclusiveness in planning would secure community buy-in, remove unrealistic pledges or expectations and smoothen project implementation.

Keywords: conflict dynamics, geothermal project implementation, involuntary resettlement, project affected persons, sustainability

[1] Published in the Journal of Conflict, Security & Development.

4.2 Background

The development of geothermal power projects increases energy availability and reliance on green energy sources which helps to enhance environmental sustainability and address global concerns over climate change (Karytsas *et al.,* 2019; Pan *et al.,* 2019). The geothermal energy plants installations reached 14.3 gigawatt electrical (GWe) by 2017 worldwide (Pan *et al.,* 2019). These installations enhance capacity for economic development for many countries (Edelstein & Kleese, 1995). Geothermal energy generation is less prone to the disruption caused by unfavourable weather conditions and thus more reliable and secure than wind, solar and hydro power generation (Kubota *et al.,* 2013; Kunze & Hertel, 2017; Pan *et al.,* 2019). Kenya's electricity generation in 2017 consisted of largely of the geothermal 44% geothermal (Boulle, 2019). However, like other flagship infrastructural developments, geothermal installations are often encumbered by developmental conflicts, especially involving local communities due to land invasion and forced population relocations.

Conflicts are endemic to society (Madalina, 2016) and unavoidable since time immemorial. Conflicts arise in any situation wherever people interact, including in developmental projects (Fenn *et al.,* 1997; Kishor & Ogunlana, 2011; Ock & Han, 2003) often as a result of incompatible interests. Whether violent or non-violent, conflicts are sometimes triggered by discontentment of the parties involved because of inadequate consultation, marginalization of communities and forced relocation associated with the disruption of local people's livelihoods (Kron & Jensen, 2016; Cheung, 2010; Dhiaulhaq *et al.,* 2014; Patel *et al.,* 2013; Yurdi *et al.,* 2010). If unresolved, conflicts can lead to hostility and war (Vestergaard *et al.,* 2011) with the potential to delay the development projects, increase its cost, lead to their

rejection by the host community, and may sometimes also result in the loss of life and cancellation of projects (Batel *et al.,* 2013; Enevoldsen & Sovacool, 2016; Jobert *et al.,* 2007; Karytsas *et al.,* 2019).

Conflicts around project development seemingly follow a similar trajectory globally (Boele, 1995) with related concerns and evolution of discontent. For instance, the Vattenfall project at Beeskow in Germany, which undertook explorations to determine the suitability of the Beeskow area for storage of CO2, encountered challenges in building trust among the local community, resulting in its cancellation (Oltra *et al.,* 2012). The public was concerned with the potential risks of carbon dioxide storage (Dütschke, 2011), including the occurrence of leakages with possible fatalities, ground water contamination, negative impacts on the real estate market and tourism. The project opponents were also anxious about the possibility of Vattenfall not openly sharing exploration results as the project benefits from a positive result.

The Tangkuban Parahu Mega geothermal project in Indonesia was halted following demonstrations by over 800 people in protest over unfavourable terms with regard to compensation as well as the project's potential to cause deadly landslides (Eko, 2015). The Niger Delta oil development project in Nigeria resulted in violent protest by the Ogoni community due to extensive oil contamination which resulted in severe degradation of the environment, detrimental health effects for the local population, and the destruction of the livelihoods (Boele *et al.,* 2001). This subsequently led to the militarization of the community (Boele, 1995) with unforeseen consequences including thousands of deaths, detention of community members, exile of key local leaders, rape and mutilation of women and children, and ultimately the collapse of the project.

In Turkana, Kenya, the Tullow Oil project, various wind power projects, and other development projects fueled conflicts that were driven by the unmet expectations among local communities (Schilling *et al.,* 2015; Schilling *et al.,* 2016). The claimed secretive manner in which the tender for the Mui Basin coal project in Kitui, Kenya was awarded to the investor, and the concern for greater benefit sharing with the host communities led to its delayed implementation since the award of the tender in 2011 (Neumann, 2015; Omondi *et al.,* 2020).

Although it is generally implied that conflicts are destructive, conflicts can, however, be useful for developmental activity if constructively managed: they can help to bring out hidden pressures or displeasure, encourage resolution of issues, and improve stakeholders' understanding of the goals and purposes of a development project (Mohammed *et al.,* 2008).

Geothermal energy development is in line with Kenya's Vision 2030, and its global commitment towards Sustainable Development Goal (SDG) 7, which is affordable, reliable, sustainable and modern energy for all, and SDG 13 which is climate action. The Olkaria IV geothermal project is located in the Olkaria geothermal block in Naivasha-Sub-County, Nakuru County, Kenya, partially within the Hell's Gate National Park (HGNP). Olkaria area is inhabited by about 20,000 pastoralists (semi-nomadic Maasai of various Maasai clans), whose main livelihood is supported by pastoralism and livestock trading, with a few community members relying on tourism activities (Schade, 2017). The Olkaria IV geothermal project has the capacity to generate an additional 140 megawatt (MW) of electricity was conceived to deliver on Vision 2030 and SDGs 7 and 13 stated. However, its installation was encumbered by conflicts that persisted beyond its completion.

Although numerous studies have been conducted on community interactions with

geothermal power projects globally (Camu & Santiago, 2000; Chavot *et al.,* 2018; Karytsas *et al.*, 2019; Pellizzone *et al.,* 2017; Schade, 2017; Vargas, 2018), there is scanty scholarly work on this topic relating to Kenya. The socio-economic, environmental, cultural and political repercussions of these projects and how they intersect with conflict dynamics is poorly understood (Unruh *et al.,* 2019). Available information is insufficiently comprehensive with regard to local community reactions, especially where undemocratic planning processes which involve limited consultation with the community are used to conceptualise and implement projects (Chavot *et al.,* 2018).

This paper addresses the insufficiency by documenting community insights on the types of conflicts that arose during the implementation of the Olkaria IV geothermal project, their effects, and how the conflicts were managed. Understanding the implication of infrastructure developmental conflicts between community and developers is essential for facilitating economic growth, and mitigating negative impacts on local communities. This article first presents the theoretical framework, then the methodology, the results and discussions. Finally, the authors conclude and make recommendations on how to enable more sustainable implementation of developmental projects.

4.3 Theoretical framework

Vested Interests Theory provides for examination of development of certain environmental conflicts and the categorization of parties involved (Schnaiberg *et al.,* 2002). Conflicts often arise as a result of incompatible and vested interests of the involved actors (Fenn *et al.,* 1997). Schnaiberg *et al.* (2002) categorises the parties into the State, the producers, and consumers. The parties in this study include the government of Kenya as the State, Kenya Electricity Generating

Company (KenGen), a parastatal established by the Ministry of Energy (MoE) to generate bulk electricity to the national grid (Gibb Africa, 2012), as the producer and the Olkaria IV community as consumers who are in conflict with KenGen over differing vested interests relating to the Olkaria IV geothermal project.

According to Schnaiberg *et al.* (2002), the State plays a two-fold role. Firstly, the State supports the accretion of capital and development for the benefit of the nation implemented by its diverse institutions like KenGen. In Olkaria IV, the government's interest was to intensify investment in geothermal energy as part of its commitment to increase electricity supply and production of green energy towards meeting its goals for climate change mitigation. As the Kenya government already had other production wells on this site, this meant that it had strong vested interests in developing further wells where production infrastructure already existed.

Secondly, the State is also obligated to protect the rights of its citizens living in the local community which is affected by development projects through environmental laws. This provides for an assessment of the potential impacts of geothermal projects and the subsequent resettlement of the community within the project vicinity, to protect them from these impacts. Thus, in case of Olkaria, the community was moved from Olkaria IV site to allow KenGen to expand geothermal production after the environmental and social impact assessment (ESIA) which was conducted found that the project would have potential negative impacts on the community (KenGen, 2010; Schade, 2017). After negotiations, the community reluctantly agreed to be relocated to a piece of land near the project site. Whereas the proximity to the project site would have enabled the community to secure temporal/casual jobs, the land had poor quality forage for their livestock.

The land in question had volcanic ash soil type that was allegedly prone to erosion and quick formation of gulleys. However, the community was keen on keeping their traditional land which they found hard to give up. The community had made significant investments in their cultural activities and village life, the value of which it was difficult to calculate in monetary terms and hard to compensate for. In addition, it was difficult to transfer cultural activities, including the performance of traditional dances to tourists and the trade in traditional ornaments and other items from the Olkaria IV site, which is located inside a wildlife park, to the new site. The resettlement area is outside this park, cutting the community off from the hub of tourism activities inside the park. This was compounded by the additional transport costs which the community would need to bear to get to the park.

While the resettlement site came with permanent houses, unlike the semi-permanent houses at Olkaria IV, these improved standards failed to satisfy the project affected persons (PAPs) due to their relocation from proximity to Olkaria IV where both their cultural activities and other income generation activities contributed to their livelihoods. Furthermore, they lost their easy access to the markets and town centres, including Naivasha, where some of their livelihood activities had previously taken place.

The competing interests exhibited by these actors are, therefore, the epitome of detrimental conflicts (Kunze & Hertel, 2017). The community was forced to relocate to a less suitable area than the one they had left, while KenGen took over their traditional lands for the purposes of power production. Thus, the conflicts persisted because the PAPs had a vested interest in continuing to reside on their traditional lands due to the easy access to markets that it provided, the better terrain and the community's *manyattas* (traditional huts*)* which were better

suited to their needs. In this regard, this study seeks to provide a better understanding of the conflict dynamics associated with the geothermal project installations in Olkaria IV with a view to identifying lessons for the proper management and sustainable establishment of larger projects in the country.

4.4 Study area

This study was conducted among 1,209 PAPs spread across 155 households in the relocated area at the Resettlement Action Plan (RAPland) village (GIBB Africa, 2012; Schade, 2017) in the development area of Olkaria IV. Olkaria IV is situated in the Olkaria geothermal block in Naivasha Sub-County, Nakuru County (See Figure 2 in Chapter Three). Gazetted as a Geothermal Resource Area in 1971 (Sena, 2015), the geothermal field is located in the Hell's Gate National Park on KenGen's land covering approximately 80 sq. km. The Park lies at 0°54′57″S, 36°18′48″E, to the south of Lake Naivasha which is about 120km north-west of Nairobi. Olkaria IV power plant has an installed capacity of 140 Megawatt (MW) owned and managed by KenGen. The project was established with the financial support of the Government of Kenya (GoK - 22%), the Japan International Cooperation Agency (JICA - 23%), the French Development Agency (AFD -15%), the European Investment Bank (EIB - 12%), World Bank (WB - 7%), and the German Development Agency (KfW - 7%). The surplus (14%) was provided by KenGen (Abad, 2015; Schade, 2017).

The development of Olkaria IV necessitated the relocation of four villages, namely, Cultural Centre, Olonongot, OloSinyat and OloMayana Ndogo (GIBB Africa, 2009). GIBB Africa, a consultant firm, was contracted by KenGen to develop a RAP to facilitate the resettlement process. The four villages were inhabited by the Maasai Community. The PAPs

were resettled on a piece of land measuring 1,700 acres, upon which they were to get title deeds, modern infrastructure, social services, and grazing land. The PAPs depended mainly on pastoralism and livestock trading while those from Cultural Centre relied principally on tourism (selling of curios and guiding of tours) (Schade, 2017).

4.5 Methodology

4.5.1 Reconnaissance and preparation

A reconnaissance study was conducted in May 2019. During this visit, four research assistants: three male and one female were recruited. The research assistants were all drawn from RAPland and trained on the different aspects of the questionnaire as well as interview techniques. The training also covered etiquette for peaceful and fruitful field research. The research assistants were provided with flip charts, notebooks, string and pens. They helped to draw a sketch map of RAPland depicting the four villages including OlooNongot, OlooSinyat, OlooMayana Ndogo and the Cultural Centre (Figure 2 in Chapter Three). The sketch map also depicted important landmarks including the community dispensary, the two churches, the primary school, the secondary school and the road system. The RAPland chief elder also gave input into the map. The training was conducted at the RAPland Gospel Church. The semi-structured questionnaire was trialled to fine-tune the questions.

4.5.2 Study design

The aim of the study was to capture PAPs' input on conflicts associated with the implementation of the Olkaria IV geothermal project, their type, nature and manifestation, their effects on the community, and how these conflicts were managed. Data was collected over a period of two

months between May – November, 2019. The study employed different methods to collect both quantitative and qualitative data. The quantitative data, which was gathered through a household survey, included the respondents' ages, the number of people per household, the period between project inception and relocation and also percentage of the respondents that resisted relocation and those that upheld the relocation process. The qualitative data was collected through three focus groups and eight key informant interviews. This data was also captured through open-ended questions in household survey. This data included respondents' views on the initiation of the project through its implementation, the project information received by the PAPs and their sources as well as the associated conflicts which emerged, their effects and how they were managed. An evaluation of secondary sources of information including journal articles and published books on infrastructure development and conflicts was also conducted.

4.5.3 Sampling

This study targeted a census of all of the 155 households in the four villages relocated to RAPland, although only 117 households were actually surveyed. 24 households were not occupied at the time of the study because the occupants had temporarily moved out of RAPland in search of greener pastures. The members of 14 other households were also unavailable because of work-related engagements outside RAPland that saw them only return home late at night.

4.5.4 Data sources

Secondary data were obtained from reviews of published and unpublished literature from varied international, national and local sources. The literature was related to involuntary resettlement

and also conflicts associated with the installation of the geothermal power plants and other infrastructural developments. The results from the reviews have been used to supplement primary data gathered on conflicts connected with the installation of Olkaria IV geothermal plant in Kenya. This data was collected via household surveys, focus group discussions (FGDs), key informant interviews (KIIs), and field observations.

4.5.5 Data Collection

4.5.5.1 Household Survey

The semi-structured questionnaire was administered to household heads and, where they were absent, to offspring above 18 years old in order to elicit individual household experiences regarding the dynamics of conflicts associated with the Olkaria IV project installations.

4.5.5.2 Focus Group Discussions

A checklist guide was prepared based on a questionnaire survey and used to collect qualitative data on how the community learnt about the Olkaria IV project, the information received about the project, their reaction, how relocation was conducted, how conflicts ensued, and how they were addressed. Three FGDs were conducted (consisting of elders, women and youth) with eight participants in each group. The youth group consisted of four male and four female participants who equally and actively participated in the discussions. The female elders were separated from male elders in order to facilitate free participation and discussion because Maasai culture forbids women speaking openly among men (Hodgson, 1999; Onyima, 2019). Judgmental sampling was applied in the selection of the FGD participants to ensure their capacity to provide useful insights on the subject matter. Consent was sought and granted to record these FGDs.

4.5.5.3 Key Informant Interviews

Further qualitative data was collected via interviews conducted with eight key informants. These informants were also judgmentally selected for their ability to inform the study objectives. The informants included participants of a mediation process that had been successfully conducted to resolve conflicts that persisted after the community was relocated. These participants were one mediator, two informants from the complaints group, two from the Resettlement Action Plan Implementation Committee (RAPIC), a representative from KenGen, and two Village Elders at RAPland. A standard interview guide for the eight key informants was prepared ahead of the interviews. None of the participants gave their consent for the interviews to be voice recorded, so meticulous notes were taken.

4.5.5.4 Field Observations

Field observation of the RAPland's topography, the established facilities and infrastructure, and PAPs' livelihood activities was made. Photographs were taken and informal talks led by the research assistants were also used as an additional method to compliment the information gathered.

4.5.6 Data Analysis

The completed questionnaires were checked for accuracy and coded. Quantitative data on the respondents' ages, the number of people per household, the number who participated in mediation, and the number of issues mediated was organized in an Excel spreadsheet. This data was imported into an R programme (Gentleman, 2008), and subjected to descriptive analysis using frequencies and percentages. Qualitative data on respondents' reflections on all aspects of

project information, conflict and its escalation, effects and how conflict was addressed were typed up, and the interview recordings transcribed. The transcripts were imported into qualitative research software, NVivo (Bazeley, 2013), coded and content analysis applied through deductive and inductive processes. The summaries of the narrations are used in the discussion in the next section, with data displayed using illustrations and tables.

4.6 Research findings

4.6.1 Conflict foundation

The types, effects and management of conflicts at Olkaria IV geothermal were manifested in all phases of the project cycle as illustrated (Figure 3).

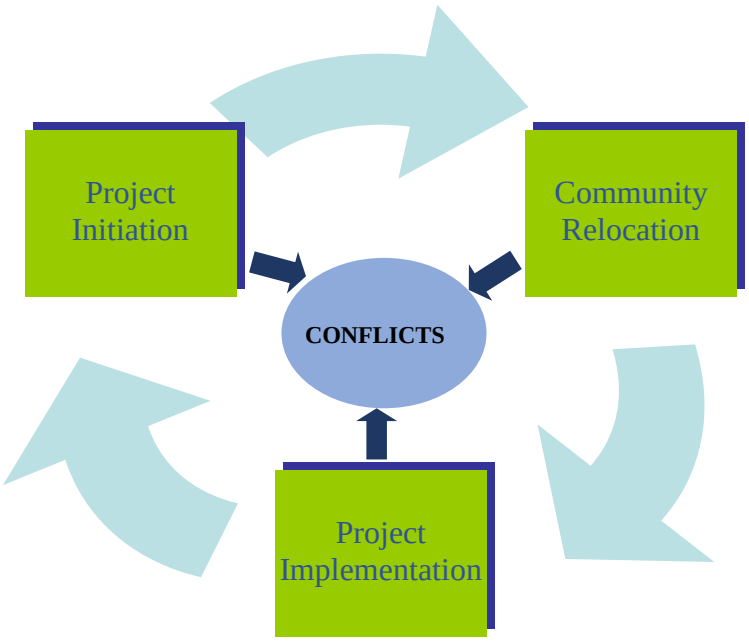

Figure 2: Conflict Phases at RAPland

At the project's initiation, the resident community at the project site learnt from several sources, among these the media and members of neighbouring communities, (Figure 4) that KenGen had identified Olkaria IV area as a potential site for setting up a geothermal plant. KenGen was considering installation of the additional plant as part of the Kenya Electricity Expansion Project (KEEP). The aim of the project was to generate more power (140 MW) to contribute to the national grid and to increase the country's gross domestic profit. The respondents revealed that an Environmental Social Impact Assessment (ESIA) had been conducted. The results demonstrated that the drilling of the power plant would negatively impact on the health of the community. This information was also confirmed during the FGDs:

> *We were told about the establishment of a geothermal power plant which would have seen us resettled. We were convened and told of the negative and positive effects of the project, which included: respiratory diseases due to dust emissions, generation of the electricity to benefit the entire nation, benefit sharing, employment for majority of the youths and scholarships/bursaries/sponsorships. We were told that when the community continued to stay around the project, there would be an influx of people and we would easily get diseases not found in our area and which would spread faster because of the high populations* (Elder's FGDs, RAPland, 25 May 2019). *There would also be miscarriages and hence relocation was necessary* (Women's FGDs, RAPland, 25 May 2019).

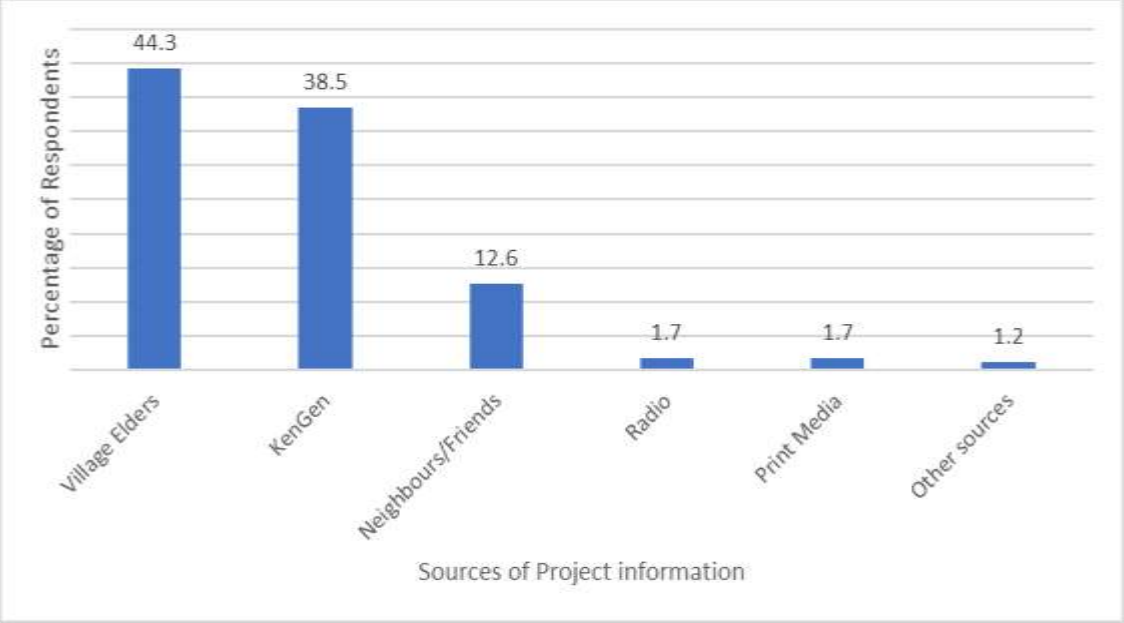

Figure 3: Sources of information about Olkaria IV project.

PAPs had also been told that the project would bring numerous benefits to the community, along with some negative consequences. The benefits included bursaries, scholarships, good housing, reliable water facilities, good accessible roads, health facilities, connection of electricity to households, land for land with title deeds, numerous employment opportunities for both skilled and non-skilled Maasai PAPs, financial compensation, improved welfare of the vulnerable PAPs, as well as sharing of revenue from the project. The negative consequences included noise pollution, relocation/loss of ancestral land, poisonous smoke/gases (Hydrogen Sulphide) and risk to grazing and livestock. Specifically, smoke emanating from the project would also pollute the air and affect the PAPs' health. However, a few respondents (5%) claimed there was a lack of coherent communication of the information regarding the project. They were only given a few months' notice to relocate without being told the exact reason for the need to move.

With regards to relocation phase, a majority (57%) of the respondents were ready for relocation while 43% were hesitant. However, most of the respondents (77%) were of the opinion that KenGen should have prepared them better for the relocation. Only 23% were satisfied with the relocation process. The respondents said that, they should have been given adequate time to relocate. In addition, KenGen should have adequately compensated them financially to enable them buy basic needs including food and furniture to facilitate a smooth relocation and settlement at RAPland. A respondent stated, *'We were relocated in a very bad way, we were equated to prisoners; who have no rights. Houses were supposed to have been furnished; my life and that of many PAPs went bad* (Female PAP at RAPland, 3 June 2019). Consequently, a majority (80%) would not recommend involvement in a similar process of relocation, either if they had to be moved again or if another community had to be moved.

During the project implementation phase, the PAPs anticipated the fulfilment of the promised socio-economic benefits of the project. These included the developer's promises of a six-month package of financial support for the PAPs, employment for the youth in the community, adequate water points, stabilization of the gulleys and, issuance of land title deeds. However, these pledges were not fulfilled to the community's expectation. It was claimed that the developer's failure to follow the memorandum of understanding (MoU) led to complaints and conflicts that prompted some PAPs to write to the project financiers, the World Bank and the European Investment Bank, seeking intervention. According to participants in the FGDs and KIIs, conflicts would possibly reoccur should there be inadequate implementation of the MoU.

4.6.2 Conflict types

The study established four types of conflicts which emerged, including socio-economic,

environmental, cultural and political conflicts (Figure 5).

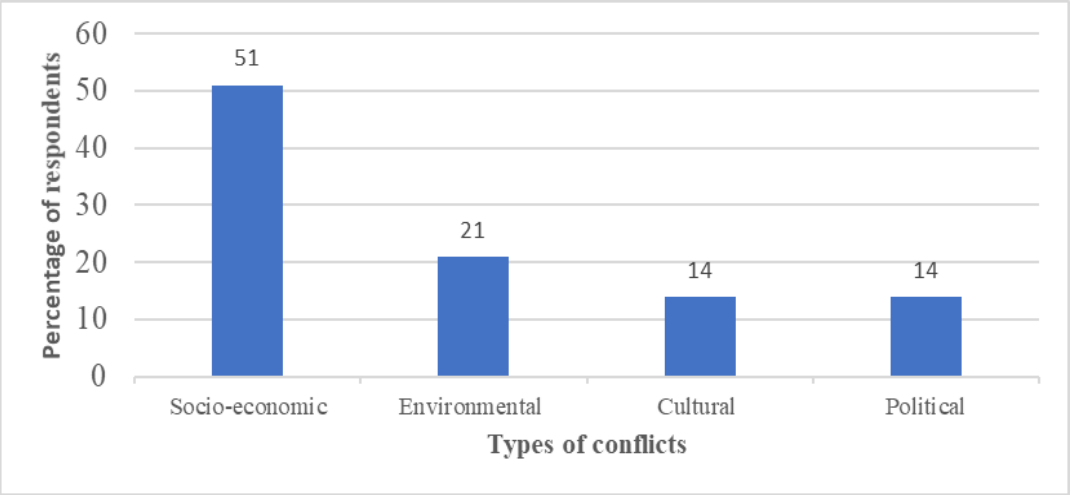

Figure 4: Type of conflicts manifested at RAPland

4.6.2.1 Socio-economic conflict

51 per cent of the respondents stated that the bad roads, along with the increased distance that they need to travel to work and the shopping centres in Kamere and Naivasha have led to increased travel costs. This problem was compounded by the limited means of transport that were available. Additional constraints identified by PAPs included inadequate and unreliable water collection and watering points, porous RAPland borders due to incomplete fencing, a lack of reliable electricity supply and declined income accrued from selling of traditional ornaments and guided tours as expressed by a respondent, '*The relocation decreased my rate to employment because I moved many kilometres away from the project. When I get a clue of employment, it is already too late because transport is the most problem,'* (Male PAP at RAPland 27 May 2019). Another interviewee stated, *'Relocation resulted in long distances, transport cost went up, it took*

too long to walk to work. I delayed to attend to tourists and business declined,' (Female PAP at RAPland 23 May 2019). The latter was of concern particularly for most of the respondents from the Cultural Centre villages whose livelihoods were also supported by tourism. The former settlement was preferred due to the ease of earning a living. In the new village PAPs faced significant income generation uncertainties, due to the difficulties in keeping livestock and the lack of alternative employment.

Some respondents were unhappy with the unfurnished houses that they were given which lacked the basic necessities for a new lifestyle. Specifically, they stated that they were forced to relocate before they were ready without being fairly compensated. One respondent aptly put it, '*I wanted to be compensated and there was not even a single shilling for me: my children were stranded, with nowhere to go,'* (Male PAP at RAPland 21 May 2019). And another said, *'Some of my tenants had not paid before relocation, I did not have money for my children. Two of my sons were left out. I had two houses and I was given only one house at RAPland,'* (Male PAP at RAPland 3 June 2019). Thus, the unfulfilled promises of improved livelihoods and living standards that were made by KenGen resulted in distrust.

4.6.2.2 Environmental conflict

At first sight, the RAPland appeared dry and frequently visited by drought. The terrain suffered from severe and frequent soil erosion occasioned by rain and the poor landscape. It was also characterised by poor grazing areas of low-quality pasture. The inhospitable valleys and gullies engendered a fear of death among members of the community and their livestock which were vulnerable to injury. The terrain was infested by wild animals, especially hyenas, which became a nuisance by killing PAPs' livestock daily. 21 per cent of respondents expressed dissatisfaction

with the general state of RAPland and indicated a preference for their traditional lands. They were unconvinced that the geothermal developments actually posed a real danger to inhabitants, thus necessitating their move, since they were never provided with documented scientific evidence of the potential negative effects of the noise pollution, as claimed by KenGen. However, according to the KIIs that were conducted, the community had been given an opportunity to select an alternative site, but settled for RAPland so that they could remain relatively near the project site.

4.6.2.3 Cultural conflict

14 per cent of the respondents spoke of conflicts related to their attachment to their ancestral land, homes and culture and to the loss of livelihoods which occurred as a result of their relocation. Notably, the erection of the fence around the plant's area and around RAPland would restrict the community's access to some grazing areas, interfering with their nomadic way of living. The standard two-bedroom houses built at RAPland did not cater for the customary needs for separate units for the husbands, wives, sons and daughters for the PAPs that had several *manyattas* (households) at the former site. In this light, a respondent stated, *'I and my family are many and the room is too small. It is not enough for us; we are so congested. Cultural mixing of boys and girls in the sleeping room is a taboo,*' (Female PAP at RAPland 21 May 2019). The FGDs with women revealed that some of them were dissatisfied, since they were denied voice because of their sex, suppressed, and their views disregarded. The respondents also acknowledged that they had elected leaders who made decisions on their behalf, with which they had to abide irrespective of their feelings on the matters.

4.6.2.4 Political conflict

The respondents advised that KenGen had indicated that the plant would emit poisonous gas (Hydrogen Sulphide) and noise which would negatively impact on their health and that of the community's future generations if they continued to live next to the project site. Most of them noted the inadequate and improper sharing of information relating to the project development. Furthermore, their participation in project development meetings and involvement in the decision-making process was inadequate. According to 14 per cent of the respondents, KenGen tricked them to relocate so as increase the company's geothermal perimeter by making promises that were never fulfilled as a respondent from OlooMayan Ndogo noted:

> *During KenGen's preparation of the community for relocation, a lot of lies were promised. I'm saying lies because they never came to fulfilment later e.g., gulleys were to be stabilised, KenGen promised better livelihood measures for the first six months for settlement and water to each family's home,'* (Male PAP at RAPland 22 May 2019).

77 per cent of respondents would have appreciated more support to prepare for the relocation. They suggested that KenGen should have compensated them financially and given the PAPs adequate time to relocate instead of using force and threats. According to 43 per cent of the respondents, they were unhappy with the arrangements, but lacking power to challenge them, succumbed to KenGen's pressure to relocate. This problem was compounded by inadequate support from other community members, who were reportedly too quick to accept KenGen's pledges. Some PAPs also alluded to statements made by KenGen to the effect that the geothermal plant was a government project and, either way, the community had no choice but to relocate.

4.6.3 Nature and manifestation of the conflicts

Due to resentment and dissatisfaction, these conflicts arose between KenGen and the PAPs when the latter learnt of their unavoidable relocation to pave way for the Olkaria IV project. Half of the PAPs participated in community-organised peaceful protests against the relocation. Community meetings were held to strategise on how to resist KenGen's relocation plans, during which the youth received advice on how to spearhead the resistance from the elders whose age limited their active participation. The protesters attempted to block roads. Although the demonstrations were non-violent, criminal elements within the communities also manifested their displeasure by looting shops. However, the protests were thwarted early on following talks with the KenGen which did not lead to a resolution of the protesters demands and resulted, instead, in half of the resisting group feeling aggrieved, without the opportunity to speak or share their thoughts and vent the resentment that they harboured within themselves.

4.6.4 The dynamics of conflicts

According to the FGDs and KIIs, during the project initiation and relocation, conflicts resulted in abandoned businesses at the Hell's Gate National Park and reduced tourism activities. This impacted negatively on the livelihoods of members of the Cultural Centre village, which was at the core of these activities. In addition, 41 per cent of respondents noted that about half of PAPs lost their jobs through punitive measures taken for participating in protests against relocation. '*KenGen targeted those who attempted to resist relocation and denied them job opportunities as well other benefits like scholarships and bursaries hence, causing anxiety among community members,'* (Youth FGDs, RAPland 25 May 2019*).*

The interviewees also claimed that those who resisted relocation lost friends. PAPs that

were seen to associate themselves with the resistance group were threatened with the legal sanctions and isolation by KenGen. The RAPIC members who held opposing views on the project were evicted from this committee. A few community members were arrested, questioned and released. PAPs' understanding of their rights encouraged them to write to the project financiers, specifically the EIB and WB seeking their intervention in the conflict.

FGD participants indicated that the conflicts around the Olkaria IV project resulted in the WB and the EIB calling for mediation. The mediation process, held after the relocation had occurred, was successful according to 82 per cent of the respondents. They applauded the mediated negotiation of the twenty-seven main areas of disagreement including the construction of additional houses for those who had been neglected, improved services at RAPland, restoration of livelihoods and the issuance of land title deed, among others, most of which were amicably addressed. This has, since then, led to an improved relationship between KenGen and the community.

4.6.5 Management of conflicts

The study's inquiry on how conflicts associated with the Olkaria IV thermal development project were managed illustrated diverse conflict resolution approaches adopted by the PAPs as categorized in Table 2:

Table 2: Conflict Management Methods at Olkaria IV

Approach	Indicator	Project phase	Percentage
Competition	1. PAPs were threatened that their houses would be torched and they would be imprisoned if they refused to relocate; 2. Some PAPs were denied relocation benefits; 3. A 'divide and rule,' strategy was applied by community leaders and the developer; 4. Some PAPs were awarded jobs and scholarships to reduce their resistance and avoid conflicts; 5. The developer promised 'heaven' at RAPland; 6. Community initiative was suppressed - KenGen did not want PAPs to write letters to financiers in protest against the project; 7. Illiterate PAPs were used to sign the MoU; 8. Leaders were 'bribed' by being taken to seminars and used to 'sweet talk' PAPs into relocation.	Initiation Relocation	31
Avoidance	9. Resistance was ignored by the developer who was annoyed and insisted on relocation; 10. Some PAPs were willing to resist but lacked majority support; 11. Individuals had hidden and uncommunicated 'private resistance,' but did not speak out to anyone else; 12. The majority of PAPs, including their leaders, had accepted to relocate; 13. The developer threatened to forcefully move livestock and goats;	Relocation	27
Collaboration	14. Meetings were held between KenGen and community leaders; 15. Community leaders organized *Barazas* (public meetings) to convey their deliberations with KenGen.	Initiation Relocation Implementation	17
Compromise	16. Mediation and negotiation	Implementation	13
Accommodation	17. 'We had no choice but to move because Olkaria IV is a government project'; 18. 'We welcomed the Kenya Electricity Expansion Project (KEEP) because it will benefit the entire nation.'	Initiation Relocation	12

4.7 Discussion

From a conflict management point of view, project initiation is the most crucial phase of project development and implementation. The manner in which a project is introduced to the likely PAPs and the availability of information regarding the project play a significant role in determining its acceptance by PAPs and its long-term sustainability (De Jesus, 2005).

In the case of Olkaria IV, project information was mainly shared with the PAPs by their community leaders. This is likely because, traditionally, the selected Maasai elders are given the mandate to lead and make decisions for the community. KenGen engaged these leaders on establishment of Olkaria IV who then proceeded to disseminate the information among the PAPs. The positive reception of information is, therefore, dependent both on how the leaders convey the information to the PAPs and the nature of their relationship with the community. Community leaders have the potential to either market the project among the community members in a positive manner or incite them to reject the project. The success of projects is also, therefore, very much dependent on how leaders perceive the benefits of the projects to their community (and themselves), their relationship with the project developer (in this case, KenGen) and what information the developer share with the community leaders.

The information received regarding the project can influence its smooth implementation or otherwise prompt conflict. In the case of Olkaria IV, the PAPs were initially excited and ready to embrace the project, mainly because of the anticipated benefits. They were convinced that their livelihoods would be improved. This can be attributed to the PAPs' lack of a clear understanding of the consequences of relocation (Hughes & Rogei, 2020) hence, a potential source of conflict should the developer fail to translate their promises into actions and deliver the benefits which the PAPs were expecting.

While the role of renewable energy in promoting clean, reliable and sustainable energy sources is increasingly recognized globally (Chavot *et al.*, 2018; Pellizzone *et al.*, 2017), the potential involuntary relocation and associated impacts on the well-being of affected communities which accompany large project developments are often painful. At the study site,

the PAPs' main livelihood was livestock keeping, though there was also trading, and cultural activities related to tourism as also observed by (Schade, 2017). The decline in livestock production would perhaps have been unavoidable had the PAPs fully appreciated that the RAPland consisted of poor terrain, gulleys and valleys that would become a death trap for their livestock. The decline in livestock might, in turn, ignite further intra- and inter-community conflicts because of the increase in cattle rustling that would likely result, a common coping strategy among herding communities in most of the arid areas of Kenya (Malley *et al.,* 2008). Conflicts were also likely to emerge over competition for scarce pasture within the community land leading to injury or even loss of life and impoverishment of the PAPs who relied most on livestock production.

The increased distance to the market centre, including Kamere and Naivasha, also meant that PAPs spent more time traveling and paid more for transport. This reduced the resources available for other livelihood needs such as food. Furthermore, the increase in distance made it more difficult to effectively manage tourism activities resulting in a decline of income. The conversion of their pledges into actions (Mensah & Okyere, 2014; Schilling *et al.,* 2015) by KenGen, including the provision of financial compensation, would have reduced the emergence of conflicts as also adopted in geothermal projects in Philippine (De Jesus, 2005).

In the cases of Philippine, physical and economic dislocation of settlements, inadequate consultation and lack of benefits among others were the reported social issues raised against geothermal projects in Phillippines since 1990s. To address these concerns and facilitate smooth operations of the thermal projects, the PNOC Energy Development Corporation in-charge of these projects prioritized the actual implementation of the commitments where all pledges

including Environmental Guarantee Fund, host communities' economic packages and awareness and acceptance campaigns became part of the standard procedures in field operations. As part of translating commitments into action, the company engaged the residents in replacing the 445-hectare area developed for its five projects with about 8,050 hectares of agro-forest plantations to meet its claim of minimizing forest destruction and empowering the local community (De Jesus, 2005).

The unmet project expectations became a source of conflicts also during project implementation phase. Because the conflicts were not well addressed, it became possible for concerns to escalate and compromise the positive gains already achieved, and also soured the good relationship established between KenGen and the community. This threatened to undermine that peaceful and harmonious co-existence needed for KenGen to proceed with the next stages of its geothermal project (Olkaria V and VI) as well as other future developments elsewhere in the country.

Most respondents preferred their former settlement, perhaps because of their accrued knowledge of their surrounding which helped them to readily make ends meet. Customarily, the Maasai live in *manyatta* villages and inhabit temporary houses made of poles which are covered with a mixture of cow dung and mud (Njeru, 2011). Such was the case in the former settlement where the community performed traditional dances and rites (Schade, 2017). But contrary to the cultural value which the Maasai have traditionally placed on *manyattas*, the majority of the respondents were excited about the prospect of owning new modern houses at the RAPland site. However, the new arrangement was not compatible with tradition where each wife and mature son owned and lived in individual *manyattas*. Forethought and better planning would have

provided for customarily-acceptable relocation units for the respondents that catered to the different needs of daughters, sons, wives and husbands. The excitement at the prospect of owning modern houses at RAPland is perhaps an indication of gradual erosion of the Maasai's nomadic pastoralism and cultural values (Njeru, 2011). More evidence of cultural erosion took the form of small-scale farming, where the PAPs planted a variety of food crops including maize, beans, vegetables, bananas and pawpaws, to supplement their main source of livelihood.

The seasonal Maasai migration of livestock traditionally enabled them to crisscross different areas including the new site in search for pasture and water for their livestock. Thus, the PAPs were already familiar with the layout of the RAPland, the valleys and gullies, the loose volcanic soils and the challenges inherent in living there. It is therefore unclear why the PAPs accepted to relocate, given this prior knowledge. It could be that the majority of the PAPs (62 per cent) had no formal education, hence they did not adequately comprehend the costs of relocation as also suggested by Hughes and Rogei (2020), in their study on feeling the heat: responses to geothermal development in Kenya's Rift Valley. However, it should have been that the decline in grazing area occasioned by restricted access (Melubo & Lovelock, 2019; Ogwang *et al.*, 2018) to particular grazing areas due to the fencing around RAPland would possibly, interfere with the community's nomadic lifestyle. This could possibly ignite conflicts with KenGen or other neighbouring communities. Clearly this type of conflicts should have been foreseen by KenGen and picked up by the Environmental and Social Impact Assessment (ESIA): this is evidence of a planning failure that could have been avoided. In addition, a participatory demarcation of grazing areas in the local community involving all key stakeholders could also have served to manage this potential area of conflict.

With regard to the project consultation processes, the female PAPs generally felt that they were denied a voice during the relocation planning. Often men made decisions for women leaving no room for them to express alternative views. The study results have indicated low empowerment of women within the community. It is unlikely that their status has changed much since Hodgson wrote in 1999 that, 'Women among the Maasai community are accorded equal status with children,' (Hodgson, 1999). The Constitution of Kenya 2010, Chapter Four on the Bill of Rights provides for women to have equal rights to men to participate in politics, laying the foundation for the inclusion of women in decision-making process from the grassroots to the national level (Grillos, 2018). However, traditionally, the Maasai elders (men) are mandated with the overall decision-making on community issues, as also demonstrated when they participated in dialogue with KenGen over the relocation process. Some respondents were effectively coerced into relocating due to decisions made on their behalf by their leaders, leading to claims that certain leaders had been favored by KenGen. There were hints of possibilities that some of the community leaders were induced to taking a softer stance in the conflict. Since the leaders were taken into capacity building workshops, it is also possible that they gained appreciation for the project that the general community did not have. Tasked with the leadership role, the leaders should have gone further to consult with the female members and find ways to manage their contrary opinions. While culture is a significant part of the sustainability discourse (Shortall & Kharrazi, 2017; Soini & Birkeland, 2014), clear identification of the kinds of conflicts that can emerge in such settings is imperative to their adequate management.

The environment upon which the community expected to be resettled on should have enabled restoration of the livelihoods of PAPs or its improvement in compliance with World

Bank Environmental and Social Safeguard Policy (World Bank, 2016). However, the PAPs settlement on RAPland, which was close to the project site, was perhaps the necessary evil in disregard of their anxieties over the unhospitable topography. A demonstration of the value for the economic benefits over ecological, in order of magnitude.

The project's impacts on the quality and health of the community may not have been readily understood by the PAPs, conceivably because most of such impacts are only felt long after the project is implemented as also noted by (Mariita, 2002). This observation resonates with the case of the oil conflict in the Niger Delt region of Nigeria where the Ogoni community protested because of the extensive environmental degradation caused by oil spillages (Boele *et al.*, 2001; Kron & Jensen, 2016). The Shell Petroleum Development company was already operational but it had to pull out from Ogoni land in 1993 (Boele, 1995) because of the affected communities' protests. Environmental conflict is usually associated with negative socio-economic consequences, including on the health of the PAPs.

The Olkaria IV project demonstrates clearly that if the views of PAPs are not adequately taken on board during project decision-making processes, this is potential risk for political conflict (Hedström & Smith, 2013). The Constitution of Kenya 2010, Article 10 provides for the national values and principles of governance, whose adoption and implementation in developmental projects would promote equality of opportunity, good relations, harmony and peaceful coexistence. However, the results of this study of Olkaria IV demonstrate a serious level of laxity not only on the part of the developer, but also the community representatives when it came to consulting with PAPs. This resulted in mistrust among these key stakeholders creating a non-conducive environment for development.

The Olkaria IV conflicts were non-violent perhaps because only a small population (about 1200 people) was affected (Gibb Africa, 2012). However, the effects of these conflicts cannot be ignored due to their potential to delay the development progress as observed in oil projects in the Northern-Western part of Kenya, where Tullow's operations have continued to be interrupted by the local communities following unmet demands (Schilling *et al.*, 2015; Schilling *et al.*, 2016, 2018). While KenGen and PAPs held meetings to resolve the issues, the post-relocation conflicts confirm the possible inadequacy of their efforts. This could have been occasioned by the possible lack of trust not only between KenGen and the PAPs but also among the PAPs, exacerbated by the power imbalances which could have resulted in the likely subjugation of weaker party, in this case the PAPs.

Conflict avoidance and accommodation by PAPs especially during relocation, was likely due to fear for retribution. The PAPs may have been cognizant of their inevitable loss of battle to KenGen which would have made them more impoverished. Either, their leaders' cooperation with KenGen left them with no option. Often, where a national growth has to be attained, the potential negative project impacts would be deemed as acceptable collateral harm (Vanclay, 2017). This encourages the use of competition approach; offensive and aggressive (Cloke & Goldsmith, 2011) conflict management style. Competition was the main approach resulting in forceful relocation of the resisting PAPs. However, its application would lead to detrimental effects including loss of lives, if used in projects of greater scale with large population like in the case of Niger Delta oil conflict (Boele, 1995). The results would include unsustainability and or consistent project operational challenges due to lack of its acceptability by the community.

4.8 Conclusion and Recommendations

The Olkaria IV geothermal project elicited socio-economic, environmental, cultural and political conflicts which, threatened acceptability of this important climate change facility. The conflicts were triggered by inadequate sharing of information, and PAP participation in the decision-making process in regard to project design, the relocation of the PAPs and the compensation they would be awarded. Publication participation is a constitutional right in the country, whose adequate implementation would help save such projects from community opposition. Therefore, there is a need for project planners to adequately include the local community in the design of large development projects. Inclusiveness in planning would secure community buy-in, remove unrealistic pledges/expectations and oil implementation. Where relocation is necessary, a prior negotiation strategy that ensures sufficient participation of members of the community for a resettlement action plan (RAP) should be instituted.

CHAPTER FIVE: MANAGING GEOTHERMAL PROJECT IMPLEMENTATION CONFLICTS THROUGH MEDIATION: A CASE OF OLKARIA IV PROJECT, NAKURU COUNTY, KENYA[2]

5.1 Abstract

Geothermal energy installations generate conflicts that escalate when improperly managed. Studies from outside Kenya have demonstrated application of mediation in managing conflicts over natural resources. However, its efficacy has not been adequately covered in Kenya. This study used the case of mediation between project affected persons (PAPs) and the developers of Olkaria IV energy project to document the process, to assess its role in resolving conflicts that emanated from the implementation of the project. A PAPs' household heads survey, focus group discussions (FGDs), and key informant interviews (KII) were conducted. Primary data was collected on pre-mediation preparations; mediation attributes, post-mediation buy-in and endorsements and the sequel of mediation. Secondary data was obtained from documents available in the mediation archive. The protagonists, that is, the Kenya Electricity Generating Company (KenGen) and PAPs agreed to use mediation to resolve their conflicts. The mediation neutralized conflicts between KenGen and the PAPs, mended relationships between them, improved PAPs' livelihoods and smoothened project operations. The community representatives, selected by themselves, regularly reported back and held consultation with the larger community. This promoted acceptability of the results, and is here presented as a good practice, in addition to having competent mediators with good listening and probing skills. Further, inclusion of women and youth in the mediation exercise combined with freedom of expression during the mediation

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clinics, ensured that the weaker gender's voice was heard and its input incorporated in the agreement. In spite of the above, there is a need for greater democratization for the PAPs representation, and a more comprehensive documentation of the process. The last two provide opportunity for copying this case for an improved mediation process. Finally, it is recommended that policies be formulated to provide for use of mediation as an alternative dispute resolution mechanism, in future project developmental conflicts in Kenya.

Keywords: conflicts, geothermal project implementation, mediation, project affected persons, relocation, sustainability

5.2 Background

The demand for countries to meet diverse economic needs, human development and environmental sustainability towards sustainable development and other global commitments is growing progressively. In this light, countries worldwide have intensified investments towards major projects such as road infrastructure (Khanani*et al.,* 2020), domestic and irrigation water developments, and clean energy, including geothermal developments among others (Kirchherr *et al.*, 2019; Mosley & Watson, 2016; Schilling *et al.*, 2016).

However, these large-scale infrastructure projects invade traditional indigenous and marginalized communities' lands and other natural resources (Hughes & Rogei, 2020; Vanclay, 2017) resulting in conflicts with the local communities. Although, natural resource conflicts might have been insufficiently quantified, given the growing human population and developmental projects especially in Africa, some studies recorded that 347 out of 2520 conflicts are related to the construction of renewable energy amenities (Temper *et al.,* 2018). Despite the

central role that these projects play towards increasing environmental sustainability, the communities have been discontent with their effects which, includes forced movements, demanding more sustainable development.

In Spain, for instance, the development of an 800 MW combined cycle gas turbine (CCGT) power plant in Boroa, which aimed at converting Basque Country into self-reliant in the production of energy by 2010, caused community concerns over their quality of life and health and thus triggered conflicts with the local community (Baigorrotegui, 2015).

In Asia, to meet the rising demands for palm oil and timber locally and nationally, the Indonesian government was compelled to increase plantation land to nine million hectares (Ha) by 2016 (Obidzinski & Chaudhury, 2009). This expansion was necessitated by plans to double crude oil production by 2020 to about 40 million tons (Gingold, 2010; Rokhim *et al.,* 2020). While this increase was earmarked to contribute significantly to the country's economic development, conflicts were inevitably triggered by the nature of their scale (Gritten & Mola-Yudego, 2010; Mola-Yudego & Gritten, 2010; Obidzinski *et al.,* 2012). In the year 2010 alone, slightly more than 600 conflicts between the local communities and the plantation companies were reported (Dhiaulhaq *et al.,* 2014; Rokhim *et al.,* 2020).

In Kenya, geothermal resources are located within the Kenyan Rift Valley, forming part of the East Africa Rift System (EARS) having high tectonic activities that result in higher underground temperatures than in the adjacent highlands (Mangi, 2018, KenGen, 2010). The proposed geothermal exploration aims at facilitating the nation’s transition to a newly industrializing, middle-income country by 2030 (The Energy Act, 2019). This is also in line with the country's global commitment to Sustainable Development Goals (SDGs) Seven and 13.

Development of geothermal energy in Kenya is currently preferred to wind, solar, and hydropower due to its insusceptibility to climate conditions (Hughes & Rogei, 2020; Kubota *et al.,* 2013). However, the Olkaria IV power plant development triggered conflicts between KenGen and the local communities over land use. These conflicts persisted beyond the project's completion (Kong'ani *et al.*, 2021; Schade, 2017; Shiloh, 2015).

Conflicts lead to loss of social license and can increase the developer's financial risks, and the operational costs (Munden Project, 2012) and could result in disruption of host communities livelihoods, delay implementation or cause project, rejection. If unresolved such conflict may become violent, expensive to manage, lead to injury and loss of life (Batel *et al.,* 2013; Dhiaulhaq *et al.*, 2015; Enevoldsen & Sovacool, 2016; Jobert *et al.*, 2007; Karytsas *et al.,* 2019).

For instance, the construction of the 800 Megawatts (MW) combined cycle gas turbine (CCGT) power plant in Boroa, Spain, encumbered seven-years delay, following protracted protests over the community's quality of life and health concerns (Baigorrotegui, 2015). The Vattenfall project on exploring Beeskow in Germany, area's suitability for carbon dioxide (CO_2) storage was canceled. The public was anxious over the CO_2 storage' potential risks, including leakages with possible fatal accidents and groundwater contamination (Oltra *et al.,* 2012; Dütschke, 2011).

Locally, in Kenya, coastal residents in Lamu area were apprehensive over potential ecological and health impacts, citing environmental and social hazards arising from proposed 1050 MW Lamu coal power plant. The community protests against it caused cancellation of its license in 2019 and the investor's withdrawal of its financing, (Banktrack, 2020). While conflicts

can facilitate collaboration and improved relationships (Dhiaulhaq *et al.,* 2018; Dhiaulhaq *et al.,* 2015), sustainable resolution requires effective management strategies, like mediation.

Mediation is one of the more famous mechanism of alternative dispute resolution approaches (Bercovitch, 2006; Moore, 2014; Muigua, 2019a) that has been applied since antiquity. Its use has increased across the globe (Amanda & Jensen, 2016; Cheung, 2010; Moore, 2014), playing a crucial role in resolving natural resource conflicts, and creation of long-term cooperative relationships (Folger & Bush, 2015; Rokhim *et al.,* 2020; Vukovic, 2014), especially in South Asia.

For instance, the mediation over different natural resource conflicts in the cases of Chiang Mai and Kanchanaburi (Thailand), Jambi and Riau (Indonesia), and Kampong Speu and Thom (Cambodia) resolved the conflicts and ended in attainment of sustainable resource management (Dhiaulhaq *et al.,* 2015; Dhiaulhaq *et al.,* 2014; Samsudinand, 2014). The mediation agreement for these cases were reached within a period of between six months and six years, due to the varying nature of the conflicts, the involved parties variability and the mediator's ability to help the parties reach pacts (Dhiaulhaq *et al.,* 2015).

The mediation processes in these cases comprised of a pre-mediation, mediation, and post-meditation stages. The pre-mediation phase involved social preparation and clarification of the mediation objectives, assessment of the conflicts, and the making of mediation process' design. The activities during the mediation phase were establishment of ground rules, clarification of the issues and interests, negotiations on the issues by the parties and the drafting of agreements decided upon. Lastly the post-mediation phase assessed the implementation of endorsed agreements. There was a sequel of monitoring, and evaluation of the mediation

outcomes.

Six agreements resulted from the mediation exercise in the cases reported by Dhiaulhaq *et al.* (2015) and Dhiaulhaq *et al.* (2014) with numerous social, economic, and environmental benefits and impacts realized. The residents negotiated more rights to manage natural resources and to generate income from them. The companies' corporate image to the public improved while the government's forest conservation efforts were more successful.

Continentally, during the pre-colonial era, Nigeria was constituted without litigation because mediation was used to resolve conflicts among constituent kingdoms including the Borno Empire, the Oyo Empire. Further, use of mediation as pioneer projects in countries like Ethiopia, Nigeria, Ghana resulted in amicable resolutions, demonstrating the appropriateness of mediation in the African context (Uwazie, 2011). Therefore, mediation enable formal and popular win-win situation that is impossible to attain with litigation.

While there is an increase in publications on mediation processes, and their effectiveness in managing natural resource conflicts, it mostly comes from South Asia (Dhiaulhaq *et al.,* 2015; Dhiaulhaq *et al.,* 2014; Dhiaulhaq *et al.,* 2018; Yurdi *et al.,* 2010). In practice, the mediation processes differ from one another, depending on the conflict dynamics and other factors (Bercovitch & Sigmund, 2006; Dhiaulhaq *et al.,* 2015). Establishment of mediation practice's effectiveness remains low in Kenya (Muigua, 2018; Muigua 2016), yet its relevance in resolving conflicts is enshrined, and recognized in the Constitution of Kenya, 2010, Article 159. The existing documentation are neither comprehensive on the mediation processes nor conclusive on its role in resolving developmental conflicts (Juma, 2009; Muigua, 2016; Muigua, 2017; Ambole *et al.,* 2019).

Therefore, this article sought to analyze the Olkaria IV mediation process assessing its role in resolving conflicts that arose from implementing the geothermal energy project in that area. It was hypothesized that the parties' willingness to mediate interests and principles would offer chance for compromise through resulting in a win-win outcome, healed and positive relationship, reduced conflicts, improved PAPs' livelihoods, and smoother operations of the project.

The article has used quantitative and qualitative field data collected from the PAPs at the Resettlement Action Plan Land (RAPland), in Olkaria IV area, Nakuru County, Kenya and also from records kept during the mediation. The paper begins with the theoretical discussion of mediation. This is followed by the description of the study area and explanation of the research methods leading to results and discussion. The authors conclude with the recommendations on how to improve the efficacy of future mediation exercises in resolving similar conflicts within the country and beyond. The study's findings advance the literature on the resolution of natural resource conflicts through mediation.

5.3 Theoretical framework

5.3.1 The Noll Theory of Mediation

The Noll theory of mediation focuses on mediation as a method of conflict resolution (Noll, 2001). It provides a basis for explaining application of mediation and why it is appropriate. Noll theory of mediation considers conflict dynamics, which enables reconciliation and justification of all diverging views of practice and outcome into a unified view of mediation.

Mediation is a process of conflict transformation that involves a mutually agreed upon and independent or impartial third party who has no authority to impose a solution (Bush &

Folger, 2005; Dhiaulhaq *et al.,* 2014; Moore, 2014; Nwazi, 2017; Vindeløv, 2012). The parties accept the oversight of a mediator appointed by them. While the mediator may suggest options and potential solutions throughout the process, he/she cannot impose the solution (Wall *et al.,* 2011). For the parties to reach the decision there is a measure of give and take: parties must provide as much ground as acceptable for them to live with the decision. The feeling that they make the decision enables them to deal with any hurt arising from the dispute and making an effort to live with the decision. Thus, it heals a relationship.

In line with Noll theory on mediation, in Olkaria IV's case, KenGen and the PAPs sought resolution of the conflicts that jeopardized their co-existence and smooth implementation of the geothermal project through mediation. The process considered dynamics of conflict that would enable reconciliation eventually. The disputes arose because parties had different interests and positions over the geothermal well site at Olkaria IV. Through KenGen, the government needed the land to expand geothermal production to attain its commitment to increase electricity supply and mitigate climate change via the production of green energy. The government had the legal right to compulsory takeover of the land, based on the greater public good. However, it was mandated with responsibility of community welfare, and protecting it from the potential adverse impacts arising from the project, hence the need for PAPs relocation from the Olkaria IV site to the alternative land.

The community was keen on keeping the traditional land. It had invested in the cultural inputs and villages, whose value was difficult to calculate and compensate in monetary terms. They felt they had ancestral rights to the land and also livelihood interests attached to it. They had invested in income-generating cultural activities, including traditional dances and trade in

conventional trinkets and other tourists' items. These activities were not easily transferable from the Olkaria IV site, located inside a wildlife park, to the new site, far from it.

The community was cut from the hub of tourism activities, exacerbated by additional transport costs to the park.Each party could have considered that they stood on the high ground and could win a legal battle. Instead, in the spirit of mediation, the government and the community agreed to negotiate relocation to allow KenGen to continue implementing the Olkaria IV geothermal plant project. The mediated agreement may have been deemed expensive, but KenGen may have considered it a small price to pay for the project's expedited and secure implementation.

Studies suggest that mediation's outcomes can be affected by factors such as the nature of conflict, the mediator's personality and the process of mediation (Bush & Folger, 2005; Dhiaulhaq *et al.,* 2014; Gritten *et al.,* 2009; Kressel, 2006; Wall *et al.,* 2001). In this case, the study sought to better appreciate the Olkaria IV conflict mediation process through contacting affected persons and appraising its documentation. It also vetted its effectiveness in resolving the disputes that arose from the projects' implementation.

5.4 Description of the research area

The research was conducted at the RAPland in the development area of Olkaria IV. RAPland comprises of 155 households with a total population of 1209 PAPs (GIBB Africa, 2012; Schade, 2017) situated in the Olkaria geothermal block in Naivasha-Sub-County, Nakuru County (See Figure 2 in Chapter Three). The area was gazetted as a Geothermal Resource Area in 1971 (Sena, 2015) and is located on KenGen's land covering approximately 80 square kilometers in the Hell's Gate National Park.. The park lies at 0°54′57″S, 36°18′48″E, to the south of Lake

Naivasha, about 120km north-west of Nairobi.

The area is sufficiently broad to accommodate additional power plants besides Olkaria I (units 4 and 5), that occasioned the resettlement. KenGen has marked the Olkaria IV area as a key component of the wider Kenya Electricity Expansion Project (KEEP). The Olkaria IV project aimed at contributing to the national grid, improving distribution and efficiency of the supply of electricity while bettering the PAPs' livelihoods. It has an installed capacity of 140 MW owned and managed by KenGen, but established with the financial support of the European Investment Bank (EIB), World Bank (WB), and other international institutions (Schade, 2017).

The plant's installations necessitated the relocation of four villages (Cultural Centre, OlooNongot, OlooSinyat, and OlooMayana Ndogo) from the Olkaria IV site to RAPland (GIBB Africa, 2009, 2012; Schade, 2017) located outside the park. Relocation resulted from the environmental, social impact assessment (ESIA). The ESIA findings demonstrated potential adverse impacts, including noise pollution and disruption of livelihood sources of the four villages' inhabitants.

Most of the PAPs were of the Maasai ethnic group, whose livelihood depended mainly on pastoralism and livestock trading. A small proportion of the PAPs group; Cultural Centre village relied on tourism (selling of curios and tour guiding) (Schade, 2017). The National Environment Management Authority (NEMA) endorsed the resident’s relocation, and GIBB Africa developed a resettlement action plan (RAP) to facilitate the relocation process. The PAPs were resettled on 1,700 acres of land. In addition, modern infrastructure (electric grid, schools, a health centre, a social hall and churches), grazing land and other benefits were promised to them.

5.5 Materials and methods

5.5.1 Research design

A blended methodology was employed to gather quantitative and qualitative data between May and November 2019. Quantitative data included the respondents' demographics. There was also proportioning and clustering of the mediated issues and mediation participants. Qualitative assessment of the respondents' reflection on the mediation's inception, stakeholders' involvement, the mediation process, issues mediated, and outcomes. An evaluation of secondary sources of information including project implementation reports, mediation process reports, journals articles, and published books on natural resources conflict resolution was conducted.

5.5.2 Sampling

The survey aimed to incorporate the individual household experiences on the mediation process and its role through a census of all the 155 households in the four villages at RAPland (GIBB Africa, 2012; Schade, 2017). However, only 117 households were surveyed, which is slightly above the recommended threshold that would have been calculated using a rigorous scientific formula, thus representative. The occupants of 24 homes had temporarily moved out of RAPland at the time of the study. Occupants of another 14 households were inaccessible because of work-related engagements outside the RAPland.

5.5.3 Data Collection

5.5.3.1 Preparations

A reconnaissance study was conducted in May 2019, during which four research assistants (a female and three males) were recruited from RAPland. They were trained on the various features

of the questionnaire and interview procedures, and etiquette. The semi-structured questionnaire was pretested to improve its validity.

5.5.3.2 Household Survey

An open and closed ended questionnaire was developed to capture respondents' experiences on mediation inception, process, actors, issues mediated, and the sequels. It was administered systematically to household heads or dependents aged over 18 years old in the RAPland to collect quantitative and qualitative data. Data collected was supplemented by information gathered from focus group discussions (FGDs), key informant interviews, field observations, and literature review.

5.5.3.3 Focus Group Discussions

A checklist guide was prepared based on a questionnaire survey and used to collect qualitative data through three (elders, women, and youth) FGDs. Each group consisted of eight participants purposively drawn from the four villages. They were selected based on their experiences and participation in Olkaria IV mediation process. The youth group comprised of four female and four male participants. The female elders were separated from males to facilitate free participation and discussions, especially among women, whose culture forbids speaking openly among men (Hodgson, 1999; Onyima, 2019). The participants granted consent to record the discussions.

5.5.3.4 Key Informant Interviews

In-depth interviews conducted with eight key informants generated further qualitative data. These informants were purposively selected to inform a deeper understanding of the mediation's

initiation and process and the sequels. The informants were some of those people who took part in the mediation to resolve post-relocation conflicts. They included one mediator, two complainants, two from the Resettlement Action Plan Implementation Committee (RAPIC), two village elders, and one informer from KenGen. The interviews were conducted with the aid of a checklist designed in advance. They did not consent to voice recording. However, meticulous notes were taken during the interviews.

5.5.3.5 Field Observation

The researcher made observations of the RAPland's topography, the established facilities and infrastructure, and PAPs' livelihood activities. Photographs were taken. Besides, research assistants were engaged through informal talks to complement the information gathered.

5.5.4 Data analysis

The completed questionnaires were checked for adequacy and clarifications, and coded. Quantitative data were organized into Microsoft Excel, then imported into the R program (Gentleman, 2008), and analyzed using a combination of descriptive statistics (percentages and frequencies). Data were displayed using tables. Qualitative data gathered from the household survey open-ended questions, FGDs, and informant interviews notes were typed, and the interview recordings transcribed. The transcripts were imported into qualitative research software, NVivo (Bazeley, 2013) and for coding and analysis. Content analysis was applied through deductive and inductive approaches. The summaries of the participants' accounts were used in the discussion in the subsequent section.

5.6 Research Findings

5.6.1 Demographic Characteristics

The respondents comprised females (54%) and males (46%), with 75% being household heads. The majority of the respondents were married (83%), divorced (3%), widow/widower (6%), single (6%), and separated (2%). The average household size was five. Nearly two-thirds (63%) of the respondents had never been to school. Others had primary (19%), secondary (12%), College, and University (3%) education. Majority (68%) of respondents were between 21 - 40 years, 25% were aged 41 - 60 and (5%) were aged above 60 years. Only 1% of residents were aged less than 20 years old. Nearly all depended mainly on livestock keeping (85%) with slightly more than two-thirds of the PAPs (68%) supplementing livestock with small-scale farming, employment (52%), business (20%), fish farming (2%), and charcoal burning (3%).

5.6.2 Genesis and awareness of the mediation

The majority (83%) of the respondents linked the conflicts to PAPs' hasty relocation to incomplete facilities at RAPland, disregarding the stipulations of the memorandum of understanding signed with KenGen. The developer and the community leaders held numerous meetings to talk over the issues in vain. The discontented PAPs complained to the financiers (the EIB and WB) via emails requesting their intervention. The WB Inspection Panel, in collaboration with the European Investment Bank - Complaints Mechanism (EIB-CM) and Grievances handling mechanism, traveled to Kenya in early 2015 to investigate the PAPs' complaints.

The non-resettled PAPs (NRPAPs) were converged at the former Cultural Center area. The NRPAPs shared their concerns with the investigation team over being left out of house

allocation and inadequate compensation. Also, the panel met with the resettled PAPs (RPAPs). The RPAPs complained about incomplete projects, increasing gulley erosion, issuance of the title deeds, and inadequate financial compensations. These issues were read out to the community at the RAPland's Social Hall. The issues were considered by the panel, which in collaboration with the EIB, recommended the 2015 mediation.

On general awareness of mediation, more than half (59%) of the respondents claimed not to have heard of mediation before the one in which they got involved. The rest (41%) who had heard of it, identified community conflict resolution (37%), government (22%), media (19%), school (17%), and friends/neighbors (5%) as their sources of information.

5.6.3 The mediation processes

5.6.3.1 The pre-mediation phase

Ground setting

In May 2015, the EIB-CM's designated mediator met with KenGen and the community representatives. The mediator took the parties through the mediation processes that included selecting the mediation team and negotiating the issues. The mediator also gathered the PAPs' opinions and expectations of mediation, which included resolving all contentious issues. The issues included inadequate financial compensations, water scarcity, and bad roads in the RAPland, lack of transport, gulley erosion, and issuance of title deeds, low-quality pasture, billed electricity, additional housing units, and the non-alignment of the built houses to the Maasai customs.

The EIB-CM recruited two certified mediators in Kenya based on their expertise and experience. One of the mediators had a legal background while the other was selected based on

his experience in inter alia, social issues, community engagement, natural resource management and development practices. The two mediators collaborated with the EIB-CM designated mediator in the Olkaria IV mediation. However, the later was mainly involved in weighty issues that emerged during mediation.

While KenGen readily accepted mediation, the PAPs were hesitant, fearing a commercial arrangement between KenGen and the financiers, which could have disadvantaged them. The EIB, with the mediators' support, persuaded the PAPs to accept, stating that mediation would restore and enhance relationship between the parties. The mediators also helped KenGen better appreciate the PAPs' diverse concerns and expectations to develop appropriate options to address them.

The NRPAPs were inadequately involved during this process, since the meeting venue's choice, the community Social Hall at RAPland, was far from their current homes. They also failed to participate because of ill will, as aptly stated by an informant, *'Their low participation was because of the existence of a hate seed planted by RAPIC members against those left out of relocation benefits.'* The EIB, WB, and the local mediators publicized mediation throughout the community. The pre-mediation phase also involved the selection of stakeholders and their role in mediation as presented below:

KenGen and Local Community role in mediation

Almost all the respondents (96%) pointed out PAPs and KenGen as the main parties to mediation. KenGen was represented by three participants. Although, an informant noted, *'The community was not necessarily homogenous; some of the community members were part of the RAPIC, which had participated in the resettlement process, thus made it hard to determine the*

PAPs representatives,' the community was guided by the three mediators to elect 17 representatives. An informant put, *"It was good that the mediators came to the community, met the youth, women and men and asked them to choose people they trusted 'by themselves' to represent them at mediation table."*

Thus, RAPIC and the NRPAPs nominated six members each comprising of two women, one youth, and three men. The nomination was conducted through discussion and the majority vote. The 17 community representatives including Council of Elders and the community welfare representative played different roles as summarized in Table (3):

Table 3: Community Representatives and their role(s)

Party	No. of representatives			Roles
	Male	Female	Total	
Resettlement Action Implementation Committee (RAPIC)	4	2	6	▪ Provided the institutional memories of the resettlement process. ▪ Consulted and negotiated on behalf of the resettled PAPs (150 households). ▪ Gave community feedback on the mediation progress and carried back community's reaction to the mediation issues.
Non-Resettled PAPs (NRPAPs)	4	2	6	▪ Consulted and negotiated on behalf of the non-resettled PAPs. ▪ Gave feedback on the mediation progress and carried back community's reaction to the mediation issues.
Council of Elders (CACs)	4	0	4	▪ Represented the four villages at RAPland and made decisions on the community's behalf. ▪ Also brought traditional wisdom into the mediation.
Ewangan Sinyatti Welfare Society	1	0	1	▪ Gave input on RAPland's infrastructure needs.
Total	**13**	**4**	**17**	

In addition to the mediation team, a representative of EIB-CM was invited to participate as friends of the three mediators. There was also an observer from the Kenyan Ministry of Energy and Petroleum to represent the government, and another from the WB.

Two-thirds (65%) of the respondents were satisfied with the election process. The rest were dissatisfied, citing inadequate involvement of the community in the process, failure to use secret ballots, nepotism, corruption, lack of transparency, and election of illiterate members. Further, RAPIC had worked closely with KenGen in implementation of the Resettlement Action Plan (RAP). Therefore, the NRPAPs feared that RAPIC's participation would have favored the developer as stated by an informant:

'*The participation of RAPIC in the mediation process aimed at opposing compensation for the NRPAPs. They were to side with KenGen in dismissing the NRPAPs' claims. RAPIC intended to hide KenGen's shame and instead continue to curry favour with the donors.'*

5.6.3.2 The mediation phase

Three months after pre-mediation, the formal mediation phase started in August 2015. During this stage, the mediation team hosted at least three meetings before the negotiation of the issues. The mediation Chairperson and the team drafted the procedure for the mediation agreement.

The agreement consisted of rules and code of conduct during mediation. These included:

1. Chairing of mediation sessions to be only under one of the mediators,
2. The participants to speak only on the Chair's permission,
3. The right of the Chair to coordinate responses to questions arising, and
4. The Chairs right to adjourn mediation to allow consultations among the parties' representatives.
5. Permission for non-mediation team persons to attend the mediation sessions as non-contributing participants to ensure transparency of the process.

The mediation participants were left to read and sign the mediation agreement without

mediator intervention or support. The deal was written in English yet, only 24% (4/17) of the community representatives were literate. The mediation was then conducted in three sessions, as illustrated in Table (4), and was concluded by the signing of the accord.

Table 4: The mediation sessions and focus/logistics

Sessions	Period	Purpose	Focus/logistics
One	August 2015	To identify, discuss and agree on the issues for mediation	▪ Construction of additional houses; ▪ Improvement of livelihoods at RAPland (including for the most vulnerable, persons living with disability and the elderly) through employment, USD 5,000 disturbance allowances, a refund of USD 350 for electricity, free electricity, and benefit-sharing; ▪ Improved services at RAPland: access roads, transportation, reliable water supply, enhanced medical facility, schools, scholarships/bursaries, furnishing of Social Hall with Chairs, construction of cattle dips and bridges, and rehabilitation of gulleys; ▪ The title deeds to the allocated land portions; ▪ Resolution of the post-relocation conflicts.
Two	September 2015	To clarify first mediation meeting identified	▪ Determination of suitable options to solve issues, explored alternatives and sought consensus outside mediation to facilitate conclusive subsequent mediation.
Three	May 26 - 27, 2016	In-depth negotiation of issues	▪ Open and in-depth discussions between the community and the financiers' representatives; ▪ Negotiating that financiers oversight implementation of the agreement; ▪ Compensation for the community representatives' accommodation, meals, per diem and transport; ▪ Attention to issues agreement buy-in by the larger community.
Mediation agreement	May 28, 2016	The signing of the mediation agreement	▪ The agreement was signed by all except one of the sixteen community representatives; ▪ Most community members endorsed the agreement in a *Baraza* on June 10, 2016.

5.6.3.3 Post-mediation and sequels of mediation

Most of the respondents (80%) in Olkaria IV did not participate directly in the mediation process but through representatives. However, they noted, the representation was satisfactory as expressed by nearly two-thirds (62%) of the respondents. Slightly more than half (53%) were satisfied by the process. The rest associated dissatisfaction with the inadequate publicity,

consultation at the initial stage, inadequate capacity building on the mediation process, poor coordination and limited public participation.

However, the results revealed that mediation was effective in managing the conflicts between KenGen and the PAPs. The majority (83%) of the respondent suggested they would recommend mediation of any other community development project conflicts. The mediation results were stated as follows (Table 5):

Table 5: The mediation results

Positive	Negative
▪ Agreement signed between KenGen and the community; ▪ The majority of issues mediated were implemented, including the construction of five more houses, massive youth employment (30), and improved services at RAPland; ▪ Improved standards of living at RAPland; ▪ Mended relationship and created peaceful co-existence between KenGen and PAPs, and among the PAPs; ▪ The community became aware of their rights and established linkages with the outside world; ▪ The community appreciated the local government's role of promoting unity during mediation, which improved their perception towards it; ▪ Community leaders felt more respected for their role in mediation.	▪ Increased cost to KenGen with continued demand from the PAPs beyond the agreement; ▪ Some families bore ill will for the mediation team because of perceived poor representation; ▪ Division in the community occasioned by the alleged nomination of most members from one family to the RAPIC committee; ▪ Nine (9) houses were yet to be constructed, leaving members in a state of confusion; ▪ Gulley stabilization was found to be impractical; ▪ Incomplete discussions and agreement over disturbance allowance (USD 5,000).

5.6.4 Olkaria IV mediation analysis, the features and characteristics

The responses demonstrated essential features and characteristics of the mediation exhibited during the pre-mediation, mediation, and post-mediation. The process was inclusive, bringing on board antagonistic parties, among other features as presented below:

Inclusiveness

The process brought together KenGen and the PAPs in search of an amicable solution. Notably, the community delegates represented both the NRPAPs and the resettled PAPs, although most of the issues discussed, other than housing for NRPAPS favored the latter. In terms of gender inclusivity, the mediation team consisted of four women and two youth. Besides, a female translator outsourced from a distant location for neutrality was engaged in translating English to Maa and vice-versa throughout the mediation process, bridging the language barrier.

Freedom of expression

During the mediation sessions, the parties were encouraged to speak freely. This was confirmed by an informant, “Women and youth are forbidden to speak before men. I recall I was given a chance to speak on behalf of the youth. When I mentioned something that I was not supposed to say, some men did not want. One man wanted to hit me with a bottle but the mediators helped by making them understand that everyone had a right to speak so they can be heard. It was a fair process.”

The CAC, the welfare representative, the banks' representatives, and the two local mediators were limited to listening, as required by the signed mediation protocols. The Banks' representatives and sometimes the local mediators were allowed to participate in the caucus discussions. However, the CAC and the welfare representative voiced dissatisfaction with their role during the second session of the mediation stage. This led to the breach of the mediation protocols, which saw them permitted to speak throughout the signing of the mediation agreement.

In addition, the mediation clinics provided another chance for more than 200 complaints

to speak for themselves. Eight complainants were found eligible for compensation. Five complainants qualified for resettlement and three for structural compensation.

The mediator's role and conduct

The EIB-CM designated mediator Chaired the opening session. The mediator welcomed all participants, took them through the itinerary of all mediation sessions, and officially opened the negotiations. Tension reportedly took over, as the NRPAPS believed that RAPIC representatives were principally in support of KenGen and constituted possible opposition to their contributions. Nevertheless, the mediators facilitated easiness by encouraging every member to speak openly and without restrictions.

Before each mediation phase session, the mediators held separate discussions with the parties to identify and discuss options to address such thorny issues as house entitlement and issuance of title deeds. An informant noted, 'the separate discussions were transparent, inclusive, impartial, and supportive of the communities, and aimed at correcting power imbalances.'

The mediation phase encumbered countless disagreements between KenGen and the community and among the community representatives, who often threatened to quit the process. The mediators helped to calm the parties during such incidents and facilitated the process to continue. The mediators habitually stood in between the discordant parties whenever the differences almost escalated into violence.

The mediators facilitated about thirty meetings and workshops, to support the community to reach a mutual agreement for the mediation. An informant stated, “Good listening and probing skills including listening to emotions were important. This helped to build the rapport with the community, neutralized hostility and promoted acceptability of the mediators leading to

negotiation and agreement on a wide range of contentious issues." The mediators also helped KenGen appreciate the community's anxieties and hopes.

The mediators worked closely with the Banks' GRS and the EIB-CM and updated them on emerging issues like the Cultural Center's occupation and the title deed concerns, which could have potentially affected the final mediation agreement's results.

Community Feedback

The community representatives gave feedback to the larger community and to the mediators upon resumption of the mediation sessions. The community's reaction to contentious issues was sought mainly via public barazas/meetings at the RAPland's Social Hall. However, the feedback was reportedly minimal due to the mediation design that failed to allow sufficient consultations and feedback on contentious matters. Further complications were created by some of the representatives' inability to unpack the issues to the broader community. The respondents claimed that the community did not have adequate time to share their input with the representatives.

The representatives were obligated to report and consult with their respective designated villages. Some were purportedly irresponsible since they only gave feedback when asked by community members upon coincidental contact. The community's feedback was covertly discouraged by the mediators, bound by timelines, or not implemented in the subsequent mediation sessions. The mediation resolutions validation exercise took place ten days after signing the agreement, apparently against the mediation protocols.

Endorsement of the agreement

After the third mediation session, the agreement was signed by all but one of the sixteen (94%) of the community representatives. The one abstention was reportedly because of dissatisfaction with the process. The community was convened in June 2016 at the RAPland's Social Hall for a Baraza where the mediators read out the 27 items in the agreement to both parties.

Since the agreement was already signed, the community did not see the need to give input to it. They felt that they were denied an opportunity to react to the mediation resolutions. However, most of these community members endorsed the accord. Copies were availed to the signatories, and the agreement later translated to Maa and Swahili and circulated among the community.

5.6.5 The mediation attributes

The Olkaria IV mediation process attributes are outlined in Table (6). The acceptance of the mediation by both KenGen and the PAPs laid the foundation for formal mediation agreement. The PAPs had an opportunity to identify contentious issues and vote on the agreement, albeit in an open forum. Nearly two-thirds of the negotiated items were actualized. The inadequate participation of the larger PAPs' community was notably a cross-cutting issue in the three mediation phases.

Table 6: Positive and negative attributes of the Olkaria IV mediation process

Mediation phase	Positive attribute	Negative attribute
Pre-mediation	Investigation of PAPs complaints conducted by the WB Inspection panel in collaboration EIB-CM.	Low trust between KenGenand the financiers.
	Mediation accepted by both KenGen and PAPs.	NRPAPs inadequately involved during the pre-mediation meetings (that sought to explain mediation process and solicit community expectations)because the meeting venue was far from their current homes.
	Community independently elected representatives.	Mediators were suggested by the EIB and WB/ Financiers.
	Community leaders involved.	Lack of trust and "corruption" allegations against the Developer.
Mediation stage	All contentious issues were identified and put on the table by parties.	There was insufficient community mandate and reaction on some issues.
	Issues discussed one at a time.	Some community feedback not incorporated during subsequent mediation sessions.
	Freedom of expression	Frequent threats to quit mediation by parties
	Mediators simplified language on the issues.	Language barrier: although there was a translator on duty, it was not easy to translate the nuances fully.
	Outline of issues agreed on drafted by mediators and agreement signed by both parties.	Agreement not presented to the larger community before it's signing.
Post-mediation and the results	Mediation items read out and voted on.	Open voting system/suppressed freedom of choice. It should have been done by secret ballot.
	Copies of agreement availed to the mediation team.	Translated copies not readily availed to the larger community.
	Nearly two-thirds of the negotiated issues were implemented.	The negotiated USD 5,000 disturbance allowance was never paid and nine more houses promised were never constructed.

5.7 Discussion

The post-relocation conflicts at Olkaria IV underscore the importance of translating the pledges to actions. This frequently is ignored by the developmental projects (Schilling & Scheffran, 2018). Perhaps adequate participation of PAPs in the RAP negotiation could have promoted their buy-in to relocation and avoid unrealistic pledges, expectations and conflict. While results demonstrated that mediation can help avoid conflicts, they highlighted trouble that can arise because of power inequalities between parties (O'Meally, 2014). In this case, the weaker party (PAPs) gave into hasty relocation, perhaps out of fear of victimization. This is a recipe for

destructive conflicts, especially where a large population is affected.

Cognizant of the conflicting parties' attempts to resolve issues via meetings, the post-relocation conflicts demonstrated this approach's inefficacy. Perhaps it was occasioned by the parties' likely inability or unwillingness and rigidness to talk publicly over issues, thanks to the unequal negotiation power or/and lack of trust between the parties (Bercovitch & Jackson, 2001; Dhiaulhaq *et al.,* 2014, 2015).

Mediation has widely been used globally (Amanda & Jensen, 2016; Cheung, 2010; Dhiaulhaq *et al.,* 2014, 2018; 2015; Yurdi *et al.,* 2010). Yet, the Olkaria IV community was poorly informed of it as an option for resolving their conflict with KenGen. Probably this is because use of mediation is not common in Kenya (Muigua, 2016). Also, this could be ascribed to the possible unfamiliarity with the term 'mediation,' since most communities across the continent have traditionally used mediation to resolve social conflicts since antiquity. However, it is not termed as such (Muigua, 2018).

Nevertheless, the use of mediation at Olkaria IV mirrored practices elsewhere, especially in South Asia where it has been applied following parties' failure to resolve major conflicts (Moore, 2014; Ni'mah *et al.,* 2018). While the PAPs were hesitant over mediation at its inception, the EIB-CM's assurance of the mediation's ability to resolve their issues, and to allow improved long-term relationships between them promoted its acceptance. Agreeing to mediate was one of the essential elements (Dhiaulhaq *et al.,* 2018; 2015) contributing to successful resolution of the Olkaria IV conflicts. Maybe, the parties were driven by the desire to have issues amicably resolved, as was the case of the industrial tree planting conflict in Indonesia (Samsudin & Pirard, 2014).

Effective representation of interests contributes significantly to conflict resolution. The Olkaria IV community's elected able representatives through discussions and majority vote, with the support of the mediators. The community demonstrated confidence in their ability to present their case effectively resulting in mediation's success. However, the nomination of representatives could have been improved through adequate involvement of the community and use of secret of ballots. The NRPAPs forsook their strong dislike of RAPIC's participation to represent their case effectively, and worked with them to obtain the larger community's interest. Perhaps, the community was conscious of their need for unity during the mediation since they faced similar predicaments.

While the mediators were fronted by the financiers, both parties embraced them, perhaps, due to their wish for earlier and durable solutions. An appropriate arrangement would provide parties with rights to nominate a mediator. This would be followed by negotiation on who, both parties should accept. A weak community like Olkaria could also end up selecting a weak mediator or one that can be compromised, thus the financiers could have acted in best interest to safeguard financial support, avoid loss and acquire social license. In the Olkaria IV case, the PAPs were the weaker party. The weakness comprised of poor resourcing and lower level of knowledge of the process and actual practicing mediators. Thus, they reposed in the mediators selected by the financier, who in their opinion had played a more favorable role in listening to their complaints.

Also, the mediators' recruitment based on their expertise and experience could have contributed to neutrality and their acceptability by the parties, whose central concern was reaching resolutions. This could have also helped hasten the process to avert escalation of the

conflict. It is also worth noting that the mediation was recommended by the EIB and WB following their agreement to allow parties to find solutions to the conflict. Another evidence of donor-driven mediation and lack of political goodwill for mediation in the continent as observed by Uwazie (2011).

Further, the mediators' experience and capacity to help the parties appreciate each other's concerns and interests, could have secured their acceptance and trust during the pre-mediation phase, and further smoothened subsequent phases. In Tanjung Jabung Barat mediation in Indonesia, the community was apprehensive that the mediator, having developed the company's social conflict management system, was unlikely to be impartial (Dhiaulhaq *et al.*, 2018; Samsudin & Pirard 2014). Nevertheless, considering the ability of the mediator to negotiate with the company's decision-makers, the community accepted them. Consequently, an amicable agreement was reached. It is therefore imperative that a mediator is equally accepted by the conflicting parties. Such was the case in Olkaria IV mediation.

The Olkaria IV mediation involved the three phases of pre-mediation, mediation, and post-meditation activities similarly to the six mediation cases in South Asia (Dhiaulhaq *et al.*, 2015). However, the Olkaria IV mediation was more inclusive. The PAPs representatives were allowed to consult the broader community, an essential element for a more sustainable agreement. But the mediation process plan was not explicit on the form of feedback and reporting mechanisms. Perhaps, the small size of the PAPs (1209) (Schade, 2017) made it more inclusive, despite this weakness, and consequently, the mediation resulted in the signing of the agreement.

Mediation ran for 13 months, replicating a similar period covered during the Karang

Mendapo and Lubuk Jering conflicts mediation in Indonesia (Dhiaulhaq & Bruyn, 2014; Dhiaulhaq *et al.,* 2018). However, the process was undoubtedly rushed, resulting in the removal of some of the unresolved and contentious issues, like the need for nine more houses. Maybe, the supposed fast-tracking of the process aimed at cutting down on the mediation costs arising from food, accommodation, and the participants allowances. The community's participation is key across all mediation stages. It enhances commitment to the agreement and improves the community's attitude towards the project's sustainability (Cheng *et al.,* 2019). In simple terms, there is need for recognizable attributes that are attainable and that are articulated by accepted and well-empowered representatives.

The mediators' competence and teamwork could have been core to the effective bargaining between KenGen and the PAPs. Their capacity to work with these parties to establish the mediation protocols, identify and clarify issues, organize and manage meetings, and ensure the parties' commitment to mediation, irrefutably resulted in the agreement's signing. Although the mediators managed to contain the exchanges between the parties, a pre-mediation of the community interests could have helped manage such negotiation dynamics.

KenGen's willingness to negotiate the post-relocation conflicts and the PAPs acceptance of the mediated offer may have resulted in a win-win outcome as has been the case elsewhere (Bush & Folger, 2005; Dhiaulhaq *et al.,* 2014, 2018). The PAPs had to let go some of their demand including their former settlement site, and accept the socio-economic compensation from KenGen. By signing the agreement, they considered it a fair exchange and, in any case, better than the previous arrangement that forced them to move without being heard.

KenGen could have opted for a legal decision and, no doubt, and with right and might on

its side, would have obtained it. However, good sense won the day and they agreed to mediate. The agreement allowed smooth project implementation. In addition, like in the six mediation incidents in South Asia (Dhiaulhaq *et al.,* 2015; Dhiaulhaq *et al.,* 2014), the Olkaria IV mediation's success culminated in the signing of the agreement, mended relationship between KenGen and the PAPs, and among the PAPs, reduced conflicts, improved livelihoods of the PAPs and smoothened project operations.

The diversification of the PAPs livelihoods, including small-scale farming enabled by the availability of water, supplemented the community's main source of livelihood (livestock). This could have helped the PAPs appreciate the new site and reduce possible hidden tensions and anxieties. The desire to contain costs could have made KenGen apprehensive of potential demands from the PAPs. However, in the spirit of mediation, they listened and negotiated acceptance of the ones within their project budget. Apparently, the agreement delivered to PAPs was what KenGen was willing to offer. This enabled continued implementation of the negotiated items, peaceful co-existence with the community and the project's sustainability.

Whereas, Olkaria IV mediation was successful, about half of the participants were not satisfied with the process, yet nearly all participants in other mediation cases in countries like Ghana and Nigeria were satisfied with the process (Uwazie, 2011). However, processes and nature of conflicts differ from case to another. Satisfaction with both the process and outcome of mediation is one of the four indicators, besides, efficiency, fairness and effectiveness of a successful mediation, fronted by (Sandu, 2013). Scholars argue that a successful outcome is one that meets more than one or two criteria (Bercovitch, 2011). Although, more than three-quarters of Olkaria IV participants were satisfied with the mediation’s results which, resulted in reduced

conflicts and amended relations, satisfaction with the mediation's process remains fundamental parties' ownership of the results and their implementation. Olkaria IV mediation demonstrates a room for improving mediation's processes to enhance the acceptability and sustainability of the agreement. A continuous documentation and evaluation of mediation's processes would help to flag out and address procedural issues that could threaten satisfaction with the process by parties.

5.8 Conclusion and Recommendations

Mediation resulted in the reaching of consensus between KenGen and the PAPs on contentious issues. This helped to reduce conflicts, improved the relationships between KenGen and the PAPs, and among the PAPs, demonstrating mediation's effectiveness in resolving developmental conflicts. In addition, the PAPs livelihoods were improved by opportunities within Olkaria IV project and the RAPland. Further, the community established linkages with the outside world. The selection of the community representatives by themselves and in consultation with the larger community, as a best practice could have promoted PAPs' ownership of the process and acceptability of the results. Also, the mediators' competence, good listening and probing skills resulted in successful negotiations and agreement on a wide range of issues. In addition, the freedom of expression created through ensuring women and youth's participation and mediation clinics, promoted the weaker gender's voice into mediation that would sustain the agreement. However, the mediation approach could have been improved with adequate pre-mediation capacity building among community representatives, and development of a strategy for comprehensive feedback and reporting mechanism with the community. Also, there is a need for further sensitization of men among the marginalized communities on the importance and right to participation by all parties. This will help overcome the possible cultural barriers to participation

and smoothen future mediation practices. Further, a continuous documentation of the process could have created easier replication of mediation. Finally, it is recommended that policies be formulated to provide for use of mediations an alternative dispute resolution mechanism in sustainable implementation of large developmental projects. Such policy would provide for a public list of mediators to select from and guide identification of a mediator by protagonists.

CHAPTER SIX: MEDIATING ENERGY PROJECT IMPLEMENTATION CONFLICTS, A LEARNING CURVE, THE CASE OF OLKARIA IV GEOTHERMAL, KENYA[3]

6.1 Abstract

Energy developmental projects in Kenya have elicited conflicts with local communities over their impacts, including relocation and compensation. Most conflicts remain unsolved and grievances unattended. Mediation's use is becoming increasingly popular in dealing with such conflicts. However, this initiative remains inadequately assessed and published in the country. The Olkaria IV geothermal project conflicts were mediated, creating an opportunity to appraise mediation for enhancing its application in Kenya. Quantitative and qualitative data were collected from the project affected persons (PAPs) household heads, using questionnaires, focus group discussions (FGDs), key informant interviews (KIIs), and desk literature studies. Descriptive statistics were calculated from quantitative data, while NVivo software was used to assess qualitative narrative information. Results suggested that majority (45%) of the respondents acknowledged that the mediation encumbered procedural challenges. Respondents (34%) held a contrary opinion, while the rest were not aware of any challenges. The issues included, inadequate PAPs' knowledge, attitude, contribution, and practice in the mediation, protraction, and trust issues. The delegates lacked a clear pathway for information dissemination among community members. Mediation lessens suspicion within the PAPs and increases the community's exposure to different conflict resolution opportunities. An awareness campaign preceding mediation as an effective preparation tool and appropriate engagement of the

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aggrieved parties, would improve the mediation process' efficacy.

Keywords: conflicts, geothermal project implementation, lessons, mediation, PAPs

6.2 Background

The growing petition to increase the availability and reliance of green energy for addressing global concerns over climate change and sustainability (Karytsas *et al.*, 2019) has contributed to massive investment in the exploration of clean energy including geothermal globally (Chavot *et al.*, 2018; Kombe & Muguthu, 2018; Vargas, 2018). Geothermal energy in Kenya is preferred to wind, solar, and hydropower due to its insusceptibility to climate conditions (Kubota *et al.*, 2013). Kenya projects to increase geothermal production from the current 944 MW to 5,000 MW by 2030 (EPRA, 2021; ThinkGeoEnergy, 2021), and further improve its global ranking. However, the growth of such projects often expands into occupied land resulting in conflicts with the residents.

Conflicts can be destructive and violent, especially in African countries, Kenya included (Fund for Peace, 2019) where the governance system is unstable, rendering the country prone to slightest disturbances including natural disasters and political instability. Conflicts constitute a vital part of development, especially when resolved amicably through effective management approaches like mediation (African Union, 2019; Brown & Keating, 2015).

Mediation is considered an effective process for resolving conflicts including natural resource ones (Bercovitch & Lee, 2003; Dhiaulhaq *et al.*, 2015; Muigua, 2016; Yurdi *et al.*, 2010). It is deemed helpful in cases where parties fail to resolve conflicts because of a lack of mutual trust and inequities among the negotiating parties (Bercovitch & Jackson, 2001; Yurdi *et al.*, 2010).

While mediation has been applied successfully to resolve conflicts, the process has not been immune to challenges (Dhiaulhaq *et al.*, 2014; Kressel, 2006). In Jambi province, Sumatra, Indonesia, mediation over the forest resources had to adapt to the conditions on the ground, with successive mediators and over several years resulting in high financial and time costs (Samsudin & Pirard, 2014). In the Senyerang case, the government's excessive power over the forest areas (Peluso & Vandergeest, 2001; Sahide & Giessen, 2015) limited inhabitants' compensation for the land in kind. Thus, the community was directed by the Ministry of Environment and Forestry (MoEF) to accept the offered benefit-sharing arrangement with the plantation, a glaring threat to durable resolutions.

Also, it is evident that most mediation cases failed to completely translate the agreements into action (Dhiaulhaq *et al.*, 2018). Such, was the case in Samba mediation, where instead of what was bargained for, the smallholder oil palm estate erected substandard quality roads. Yet, the residents had to repay the loans used for their construction. Also, discontent was widespread in Kuantain Singigi and Tanjung Jabung Barat mediation cases in Indonesia (Afrizal, 2015), although the community accepted the mediation agreement. These challenges could lead to unsustainable mediation results if the mediation is not properly conducted (Samsudin & Pirard, 2014).

In Africa, mediation is often donor-driven, including the Olkaria IV mediation which was recommended and implemented by European Investment Bank and World Bank, an evidence of lack of support from the local governments, as also noted over a decade ago by (Uwazie, 2011). Mediation is also deemed as potential threat to the income for lawyers, who benefit from conflict

litigation. The majority of the public is poorly informed of mediation as a legitimate method for resolving developmental conflicts.

Whereas, the process can be endless and time consuming with the unfair outcome due to power imbalances (Fiss, 1984; Muigua, 2016), the resolutions can also be forced on warring parties because of a lack of legal framework. Although traditional mediations could suffer from the non-binding nature of the agreement (Kariuki, 2014), the positive results emanating from the implementation of over six mediations in South Asia, including those whose agreement was verbal (Dhiaulhaq *et al.,* 2018; Dhiaulhaq *et al.,* 2015; Rokhim *et al.,* 2020), is a clear demonstration of the effectiveness of these mediations.

Further, scholars (Samsudin, & Pirard, 2014) saw an opportunity for mediation because of its ability to offer participatory and transparent resolutions for the involved parties. Also, mediation has the potential to reduce caseload in the overcrowded courts, hasten access to justice, and helps bridge the gap between the traditional conflict resolution strategies and formal legal methods. Mediation also reduces the post-conflict hatred as everyone comes out a winner.

While the use of mediation is demonstrated to have increased across the globe (Amanda & Jensen, 2016; Cheung, 2010; Moore, 2014), its effectiveness in addressing natural resource conflicts in developing countries like Kenya remains inadequately established (Muigua, 2016). The available information incomprehensively documents the procedural issues of mediation, and its lessons in the resolution of conflicts related to developmental projects, as also observed by (Nathan, 2009) on the challenges of mediation in Africa.

This study evaluated the issues from the mediation that was applied successfully in resolving conflicts that were linked to Olkaria IV geothermal project implementation in Kenya

between 2015-2016. It also shares the lessons learnt. The outcome is intended to help upscale and enhance the effectiveness of mediation in conflicts associated with larger projects, beyond Kenya.

6.3 The Noll theory of mediation

The Noll theory of mediation underscores mediation's importance as a method of conflict resolution (Noll, 2001). It theory offers a basis for justifying the appropriateness of mediation's use in resolution of conflicts, thus makes it a better option to adjudication and arbitration. Legal adjudication, is faulted for the fixed win-lose outcome, since the decisions are always made in favor of one person at the expense of the other. Legal decisions fail to accommodate reconciliation, as one party will always remain dissatisfied. Thus, a sense of injustice persists. Whereas, the resolution reached in arbitration is a compromise of what the law would award, reducing its bite, there are still winners and losers.

Noll theory of mediation fronts mediation as a more progressive approach considering it results in satisfaction of both parties and healthy relationships. This theory considers the nature and dynamics of a conflict which, promotes reconciliation and justification of all deviating views of practice and outcome into a unified view of mediation. A simple mediation is facilitated by disinterested parties (Moore, 2014; Nwazi, 2017; Vindeløv, 2012). But the parties negotiate themselves and agree on the solution to their differences. The negotiating persons take responsibility for the decision to bring harmony from divergent views, interests, and values by permitting flexibility in their claims. At the core of mediation is the desire to maintain a healthy relationship with one another. This value is set above the interests being negotiated. Thus, each mediation agreement is unique and dependent on the value attached to the relationship. There are

self-evaluation and discovery during the process and development of a will to lose to retain the relationship. The result is a win-win situation.

KenGen and the PAPs in Olkaria IV's case, sought resolution of the conflicts that threatened their relationship and smooth implementation of the geothermal project through mediation. The process considered dynamics of conflict that led to reconciliation. The disputes emanated from the parties' unlike interests and positions over the geothermal well site at Olkaria IV. Whereas, KenGen, on behalf of the government needed the land to expand geothermal production to increase electricity supply and mitigate climate change through the production of green energy. The government had the legal right to compulsory takeover of the land, based on the greater public good. However, it was also its duty to protect the community from the potential adverse impacts arising from the project, thus, the PAPs were relocated from the Olkaria IV site to the alternative land.

The community, on the other hand, wished to keep their traditional land. It had invested in the cultural activities and villages; whose value was hard to calculate and compensate in monetary terms. The community felt it had ancestral rights to the land and also livelihood interests attached to it. They invested in income-generating cultural activities, such as, traditional dances, and trade in conventional ornaments and other tourists' items. These activities were not easily transferable from the Olkaria IV site, located inside a wildlife park, to the new site, far from it. The relocation of the community, cut it from the hub of tourism activities aggravated with additional transport costs to the park.

Both KenGen and PAPs could have considered that they each stood on the high ground and could win a legal battle. Instead, in the spirit of mediation, the government and the

community agreed to negotiate relocation to allow KenGen to establish Olkaria IV geothermal plant. Although, mediation mended the relationships, reduced conflicts, improved PAPs' livelihoods, and smoothened project operations, the process was not immune to procedural challenges. Studies point out mediation's process, mediator's personality and the nature of conflict as some of the important factors that could negatively affect the results of mediation (Bush & Folger, 2005; Dhiaulhaq *et al.,* 2014; Gritten *et al.,* 2009; Kressel, 2006; Wall *et al.,* 2001). Thus, this study sought to understand the issues that arose from the Olkaria IV mediation for adequate resolution to improve its efficacy.

6.4 Description of the study area

The study was conducted among about 1,209 PAPs in 155 households in the relocated area at the Resettlement Action Plan (RAPland) village in the development area of Olkaria IV (Gibb Africa, 2012; Schade, 2017). RAPland is situated in the Olkaria geothermal block, in Naivasha, Nakuru County (See Figure 2 in Chapter Three). Gazetted as a Geothermal Resource Area in 1971 (Sena, 2015) the geothermal field is located in and around the Hell's Gate National Park on KenGen's land covering approximately 80 square kilometers (sq. km). The Park lies at 0°54′57″S, 36°18′48″E, to the south of Lake Naivasha which is about 120 km north-west of Nairobi. Olkaria IV power plant has an installed capacity of 140 Megawatt (MW) owned and is managed by Kenya Electricity Generating Company Ltd, (KenGen). Its establishment was financed by the European Investment Bank (EIB), World Bank (WB), and other international institutions (Schade, 2017).

The development of Olkaria IV necessitated the relocation of four villages, namely, Cultural Centre, OlooNongot and OlooSinyat, and OlooMayana Ndogo (Gibb Africa, 2009).

GIBB Africa, a consultant firm was contracted by KenGen to develop a RAP to facilitate the resettlement process. The four villages were inhabited by the Maasai Community. PAPs were resettled on 1,700 acres, upon which they were to get title deeds, modern infrastructure, social services and grazing land. PAPs depended mainly on pastoralism and livestock trading while those from Cultural Centre relied majorly on ecotourism (selling of curios and tour guiding) (Schade, 2017).

6.5 Methodology

6.5.1 Reconnaissance

A reconnaissance study was conducted in May 2019, during which four research assistants comprising of one female and three males were recruited from the RAPland. Two of the research assistants had attained O level education or equivalent, one Bachelor's degree, and the other a Master's degree. They were trained on the varied questionnaire's features and interview procedures and etiquette. The research assistants were facilitated with notebooks, pens, flip charts, and strings. A sketched map of RAPland showing OlooNongot, OlooSinyat, OlooMayana Ndogo, and the Cultural Centre villages was drawn with the help of these research assistants and with the input of a RAPland Chief Elder. The sketch map also portrayed significant landmarks on RAPland including, the two churches, the primary and secondary schools, community dispensary as well as the road infrastructure. The training was done at the RAPland Gospel Church with the subsequent pretesting of the semi-structured questionnaire for further adjustment.

6.5.2 Study Design

The study applied qualitative and quantitative research approaches to collect data from key informants, focus group discussions and household surveys, where open-ended questions were used in the later. Qualitative research sought to facilitate researchers' comprehension of the procedural challenges that encumbered the Olkaria IV mediation from the study participants (Hong *et al.,* 2018; Silverman, 2011). In quantitative research, closed-ended questions were incorporated in the questionnaire that was administered to households at RAPland. Besides, the respondents demographic attributes, this approach helped to collect data on the number of participants that were involved in different processes including problematizing of relocation, the mediation processes and issues negotiated.

6.5.3 Sampling

The study employed a census, thus targeted all the 155 households in the four villages including, Cultural Centre, OlooNongot and OlooSinyat, and OlooMayana Ndogo at RAPland. The complete enumeration sought to incorporate individual households' insights on mediation's procedural issues and lessons. However, only 117 households were surveyed, as 24 households were not occupied by the time of the study. The occupants of these households had temporarily moved out of RAPland in search of greener pastures. The remaining representatives of 14 households were inaccessible because of work-related engagements outside RAPland.

6.5.4 Data Sources

Secondary data were obtained from reviews of published and unpublished literature from varied local, national, and international sources related to issues and lessons of mediating natural resource conflicts. The results from the reviews were used to complement primary data collected through the household survey, FGDs, KIIs, and participant observations.

6.5.5 Data Collection

6.5.5.1 Household Survey

The semi-structured questionnaire was administered systematically on households at RAPland, starting from the furthest village, OlooNongot, to collect quantitative and qualitative data. The questionnaire was administered to household heads, and where absent on offspring above 18 years old to elicit their input on mediation's procedural challenges and lessons. This data was supplemented by information gathered from the three FGDs, the eight key informant interviews, and literature review.

6.5.5.2 Focus Group Discussions

A checklist guide was prepared based on the results of the questionnaire survey, and used to collect qualitative data through three (elders, women, and youth) FGDs. The groups consisted of eight participants, each drawn from the four villages. The youth group consisted of four female and four male participants who actively participated in the discussions. The female elders were separated from males to facilitate free participation and discussion, especially among women, whose culture forbids women from speaking openly among men (Hodgson, 1999; Onyima, 2019). The FGDs participants were purposively selected based on their ability to inform deep

insight into the challenges and lessons of mediation. Consent was sought and granted to record the FGDs.

6.5.5.3 Key Informant Interviews

Further, qualitative data was collected via interviews conducted with eight key informants. These informants were also selected from those judged to have deeper insight and understanding of the mediation issues and lessons. The informants participated in the mediation process that was conducted successfully to resolve conflicts that persisted after the community's relocation. They included one mediator, two informants from the complaints group, two from the resettlement action plan implementation committee (RAPIC), two village elders, and one from Kenya Electricity Generating Company (KenGen). A standard interview guide for these key informants was prepared ahead of the interviews. Consent was not given to voice record the interviews in the eight cases, but meticulous notes were taken.

6.5.6 Data analysis

The completed questionnaires were checked for adequacy, and clarifications and coded. Quantitative data on the respondents' age, number of people per household, and participants of mediation were organized into Ms Excel. This data was imported into the R programme (Gentleman, 2008), and analyzed using a combination of descriptive statistics including, percentages and frequencies. Qualitative data on respondents' reflection on mediation's issues and lessons gathered from the household survey open-ended questions, FGDs and KIIs notes were typed, and the interview recordings transcribed. The transcripts were imported into qualitative research software, NVivo (Bazeley, 2013) for coding and content analysis through

deductive and inductive approaches. The summaries of the narrations are used in the discussion in the subsequent section.

6.6 Research Findings

Olkaria IV mediation was successfully applied in reducing conflicts between KenGen and the PAPs, improving their relationships and the PAPs livelihoods within RAPland and Olkaria IV geothermal project site. However, the majority (45%) of the respondents acknowledged that the process was faced with myriad challenges. Respondents (34%) held a contrary opinion, while the rest were not aware of any challenges. The issues are presented as follows:

6.6.1 PAPs' involvement

The non-resettled PAPs (NRPAPs) were hardly included in the EIB's mobilization for the acceptance of a mediation process. Since the community's expectations and opinions of mediation were gathered at this time, the views/concerns/grievances of the NRPAPs were not recorded. The mobilization meeting was apparently conducted at RAPland in the community's social hall, which was far from the area in which the NRPAPs were squatting. Also, as aptly stated by an informant, '*the complainants' minimal involvement was caused by the sour relationship between them and the RAPIC members for being excluded from the relocation benefits.'*

The larger community's contribution was also negligible during the induction meeting. Further, the latter held little say in the selection of representatives, as stated by an FGDs participant, *'During the election, we were not involved fully, I remember I was working and the election was held.*' This resulted in some level of dissatisfaction (35%) in the process, and claims

of nepotism and corruption as several members of the same family were nominated to the mediation committee. In other words, there were claims of inadequate representation in the negotiation committee.

It was assumed that the representatives consulted and gave feedback to the larger community at meetings at RAPland's social hall. However, the feedback was reported to be minimal. The process design failed to allow for sufficient and exhaustive consultation and feedback on prickly issues. Further, this was complicated by the limited unpacking of issues, less understood by the illiterate representatives. Also, each delegate was required to report and receive input from their designated villages, yet some irresponsibly did not. They only responded to queries put to them by community members during unexpected or random encounters.

The delegates' feedback was discouraged by the mediators, to fast track the process. Therefore, some reactions from the larger community were not incorporated on resumption of the subsequent mediation sessions. Mediation resolutions validation exercise happened ten days after agreement signing, yet the community would have appreciated giving input before the signing. This was against the mediation protocols signed at the Elsa Mere Conservation center. The protocols required the endorsement of the resolutions before signing. Some families felt not represented, while those who believed that they had better ideas were excluded from the meetings.

6.6.2 The process

Mediation began officially in August 2015, long after the inception meeting that took place in March 2015. It took time to have the community agree to mediation, and an agreement to mediate drafted by the mediators. This was because, *'mediation is not a commonly known*

process although it happens in the communities, where people conduct conflict resolution in the same manner in which mediation work but they do not call it mediation,' an informant stated. The agreement provided a framework for mediation. However, it took some time to reach an agreement because of the back and forth as observed by a mediator:

> *Mediation is a tedious process; it involved lots of back and forth since communities had to agree on each aspect. This called for consultation with other community members, particularly via Barazas (public meetings). It sometimes meant going back to the drawing board when an item was not agreed upon. We started the process in August 2015 and concluded on May 31, 2016.*

Meditation was conducted in three sessions. The mediation team agreed that whatever had been discussed could not go to the community to avoid delaying the completion of the process. Issues were discussed and agreed upon before they were presented to the community. No consultation could provide input to the agreed-on items. However, it was still difficult for some of the aggrieved PAPs to agree on certain issues, resulting in a further feeling of a sense of super entitlement and compensation by the PAPs, prolonging the process. They felt that the process was rushed resulting in dropping of some of the contentious issues.

There were numerous disagreements between KenGen and the PAPs, and among the PAPs representatives themselves, who frequently threatened to quit, further delaying the process. The majority of the representatives (76%) was illiterate, and did not speak English, the language that was used for the mediation. They reportedly missed a considerable number of facts as they often sought to understand from the literate delegates during each break, and caucus negotiations. Much time was also spent in consultations outside the sessions.

6.6.3 Knowledge, Attitude and Practice

Knowledge

The respondents (59%) claimed not to have heard of mediation before the one in which they got involved. This was also confirmed during FGDs, with claims that their involvement in the mediation process was neglected as specified, '*I can't really tell what mediation is since I'm a charcoal burner, I'm neglected because I am a Samburu and I don't have a husband*.' The community claimed that there was insufficient publicity and consultation at the initial stage and inadequate capacity building for the mediation process. Lack of the latter among the representatives resulted in improper sharing of information by some of them. They did not understand a few mediation issues and questions.

Attitude

The community felt that mediation had been used to rubber-stamp KenGen's activities. Whereas, RAPIC was also being used to advance KenGen's agenda, following their collaboration in the implementation of RAP. RAPIC was deemed to have been made more powerful, overshadowing the Council of Elders (CAC), against the Maasai customs that recognize CAC as the reigning authority. Also, the RAPIC chairmen were accused of impartiality, and favoritism in determining the claimants leading to the possible exclusion of the genuine ones. Some leaders were apparently secretly "bribed," to compromise the process. The PAPs had a lot of expectations for mediation. They anticipated that mediation would have resolved all issues including, compensation of an estimated USD 5,000 as disturbance allowance, complete stabilization of the gullies as well as provision of additional grazing land. But they regretted that these items were never put on the table, never discussed, and the agreement forced exacerbated challenges in

adapting to the new lifestyle at RAPland.

Practice

A few delegates were irresponsible. They provided feedback and consulted with the community when asked by the members during accidental interactions. This was aggravated by divisions among them, resulting in their failure to behave in the manner prescribed by their discussions and the joint agreement on issues. One noted respondent stated, *'the team used to agree to do something but did not do as agreed. There were betrayals among themselves.'* Also, divisions were reported between KenGen and the PAPs. These divisions were reportedly heightened by KenGen's refusal to talk, and attempted oppression on the PAPs. The developer was accused of quarreling and manipulating decision-making process, while the mediators were accused of dictatorship in some incidents. Since only married PAPs were compensated, some PAPs rushed into marriage. Still, some of the community leaders incorporated ineligible members of their families to the beneficiary list.

6.6.4 Trust issues in the process

Whereas KenGen gladly accepted mediation, the PAPs were hesitant and distrusted the process' fairness because of the commercial association between KenGen and the financiers. Distrust was also exhibited when the complainants felt that RAPIC had worked with KenGen on RAP's implementation. Their working relationship was perceived to have pecuniary benefits for the RAPIC members. Those not members were excluded from this gain. Thus, a section of the community believed that RAPIC would be opposed to their demands as it could jeopardize their personal interests. Therefore, 35% of the respondents were dissatisfied with the selection of representatives due to, a lack of trust. Their input was not captured in the selection of the

committee.

6.6.5 Addressing the issues

Mediation clinics were held to review grievances from the NRPAPs. These clinics facilitated the construction of five more houses for PAPs erroneously omitted. These houses were meant for calming the PAPs that had lamented relentlessly, besides writing letters to project financiers. Numerous meetings were also held with the community where issues were discussed and elaborated resulting in resolution of the exiting divisions in the community.

To bridge the language barrier, a Maasai lady translator was engaged from a distant locality to translate English to Maa and vice-versa. However, the representatives noted that there were many issues that could have been inappropriately translated from English to Maa because Maa is loaded with diverse nuances.

The PAPs felt that no one was bothered about their complaints, and some remained unaddressed including the resolution of complaints from those who were yet to be compensated. The community claimed that the District Commissioner was at some point asked to, “sweet talk” them whereas, some challenges were not addressed per se, but the team moved with the majority’s opinion. Some representatives resigned from the committee, because they held contrary view.

Nonetheless, the community suggested that mediation could have been improved as follows:

1. Be inclusive with verifiable community feedback arrangements;
2. Negotiate and agree on doable things, not utopist constructs like leveling or stabilization of gulleys;

3. Livelihood issues should have been more comprehensively negotiated based on existing activities such as pastoral lifestyle and access to grazing lands, and;
4. Make arrangements for population growth.

As part of the learning curve, mediation was deemed good because it exposed the community to the outside world, increasing its network. Also, it helped to reduce conflicts between KenGen, and the PAPs within a period of about 13 months. The vulnerability assessment resulted in the identification of eligible PAPs using agreed criteria that enabled the implementation of appropriate intervention measures. The PAPs were empowered by KenGen in March 2017 to form trading groups and cooperatives. Women traders were trained on the sustainable production of curios, advertising, and marketing of such wares. The PAPs were capacity built on alternative income beyond livestock and ecotourism and sensitized on available microfinance opportunities. The Community's Ewang'an Sinyati Welfare Society trustees were empowered on accountability and governance. Also, KenGen facilitated the hiring of community bus at commercial rates through the special conditions of the contract for Olkaria I additional Unit 6.

6.7 Discussion

The study aimed to develop an understanding of procedural issues of the mediation that was successfully applied in resolution of conflicts connected to Olkaria IV geothermal project. Like any other conflict management approaches, results demonstrated that mediation also faced challenges (Dhiaulhaq *et al.,* 2018; Kressel, 2006), including inadequate involvement of the PAPs, protraction, misinformation, negativity and trust issues. While effort was made to address

the issues, probably to enhance sustainability of the resolutions, they present practical learning lessons for application elsewhere in the country.

Public involvement is one of the central values of democracy enshrined in the Constitution of Kenya, 2010 (Constitution of Kenya, 2010). Article 10, provides for a right for all citizens to have a say in decisions affecting their lives. In Olkaria IV, the community's relocation was necessitated by the results of the Environmental Social Impact Assessment that envisaged disruption of the PAPs livelihoods, with potential negative impacts on their health. Having undergone similar experiences, the input from all PAPs in mediation was paramount to tolerable results. Whereas, it is impractical to directly engage the entire community in mediation process, adequate representation should suffice. However, the results demonstrated failure in sufficient representation which resulted in in-exhaustive consultations with all the PAPs that might have threatened reaching agreement.

Perhaps, pre-mediation should have ensured objective and representative selection of the delegates and their satisfactory empowerment to negotiate on community behalf. It is also possible that inadequate contribution was caused by power imbalance between the parties that enabled the stronger party to subjugate the voice of the weaker. This is a challenge to the mediators' ability. It is also likely to result in rapid results, yet counter-productive as observed in Darfur peace talks (Nathan, 2009). The acceptance and compliance with resolutions by claimants is often increased when the disputants' positions are seriously considered (Uwazie, 2011), and subsequent contentment with the resolutions is dependent on the buy-in to the process. Maybe, the well-trained delegates would have facilitated better community feedback and input, and more sustainable outcome.

Mediation exercises, in South Asia (Dhiaulhaq *et al.,* 2018) were often characterized by the need to have community consensus and this caused prolonged periods before decision could be reached. While the community took long to agree to mediation, the indecision was likely prompted by the initial anxiety over lack of partiality on the part of mediators. This was attributed to the perceived pecuniary connection between KenGen, and the project financiers, who were driving the mediation process. Yet a threat to acceptability of mediation's results. Perhaps, perception issues could have been addressed through an awareness campaign preceding mediation as an effective preparation tool, and appropriate engagement of the aggrieved parties. Also, this could call for skillful mediators who would help to shorten the negotiation period, and enable an earlier agreement (Uwazie, 2011), thus improve mediation's efficiency.

The community's limited awareness of the mediation process, validates Moore (2014)'s call for more work in mediation to improve its awareness and use. Mediation is a structured process, whose results are also largely dependent on mediator's competency. However, the limited knowledge of mediation among the PAPs in Olkaria IV could also be attributed to mediation's low application in the country (Muigua, 2017; Muigua Kariuki, 2016), with a need for awareness creation and capacity building in the communities.

Moreover, the instigation and support of Olkaria IV mediation by EIB and WB, confirms unease over the likely little budgetary allocation for mediation and inadequate political goodwill in Kenya, and across the continent (Uwazie, 2011). Whereas, mediation has been used by the communities to resolve conflicts since time immemorial, the study agrees with (Uwazie, 2011), that the concept was alien to majority of the public as a legal method. To them, it was inconceivable that methods used to solve domestic conflicts would work in solving of

developmental, community and social conflicts, as the one in Olkaria, or elsewhere in marginalized areas.

Trust building in mediation improves the fairness of the process (Afrizal & Anderson, 2016; Sandu, 2013). It addresses the negativity and enhances acceptability of the outcome. However, irrespective of the dreaded impartiality, the acceptability of mediators suggested by the financiers, could have been embraced mainly because of the parties' desire to resolve conflicts. Perhaps, the conflict had ripened, like in the successful negotiations in Mozambique and South Africa (Nathan, 2009). However, the assurance of long-term benefits of the mediation could have aided build the parties' trust and improve their attitude which, saw it conducted to conclusion. In Indonesian mediations, it's clear that the acceptability of mediators was enabled by community's belief in their experience, and ability to negotiate with the company's decision makers, besides their wish for solutions to end conflicts (Samsudin & Pirard, 2014). However, mediation trainings would perhaps help parties appreciate the process, build trust and improve attitude towards it, promoting compliance to resolutions.

The PAPs in Olkaria IV accepted the mediation results, regardless of claims of the process' failure to meet other expectations including, compensation of about USD 5,000, as disturbance allowance. The PAPs' high expectations for the mediation reveal the inadequacy of the process to predict ability to meet agreed upon demands and to manage community's hopes. Although, mediation involves forfeiting some claims, the acceptability of outcome was primarily driven by desire for peace. The forest resource conflicts mediation in South Asia (Dhiaulhaq *et al.*, 2018) where the agreement was much less than community's original demands and terrestrial entitlements, revealed community's ability to manage expectations. The residents were also tired

of the protracted conflicts.

The claimed PAPs' oppression in Olkaria IV, and some incidents of manipulation by the developer and mediator's dictatorship could have instilled panic among the delegates, weakening their will to continue negotiating. However, the disagreements and betrayals among the representatives may have hampered their bargaining authority failing to agree on disturbance allowance, for instance. Elsewhere, the power of continued collective-action and effective campaigns changed the power relations between parties, and improved the parties negotiating power (Maryudi *et al.,* 2016). This was an enabling condition for resolution of conflict (Zachrisson & Beland, 2013). In contrast, some plantation conflicts in Indonesia remained unresolved occasioned by significant power asymmetries (Afrizal & Anderson, 2016) demonstrating the importance of improving procedural fairness in mediation.

The Olkaria IV mediation provided a host of insights. The government or any company intending to carry out a project in a community, should conduct comprehensive assessment of property ownership, and rights to communal resources such as pasture during baseline studies. This would help to enable manage potential conflicts, and avoid such a process. Adequate contribution of the residents in the decision-making process is critical. The agreement thereafter, would leave the parties content, reducing possibility of recurrence of conflicts. The mediation process needs to ensure that community apprehensions are addressed well for sustainability of the outcome. But, no matter how well the community mediation process is undertaken, some members may still be unhappy with the process and the results. However, such is democracy, where majority have their way and minority have their say.

Mediation was effectively demonstrated by the reduced conflicts, improved relationships

between KenGen and the PAPs and their livelihoods. Yet, the absolute translation of the agreement to action would determine the results' sustainability. Proper negotiation of practical items for implementation is therefore, important in determining the extent to which the agreement would be implemented. Although KenGen would have had its way in the conflict, given the power imbalances in its favour, its willingness to enter into mediation demonstrated the desire to establish the project in a peaceful community.

Mediation should perhaps be applied during RAP negotiations, to possibly help save the projects from conflicts and related costs. The successful use of mediation in Olkaria IV presents an opportunity for its upscaling in resolution of the unavoidable developmental conflicts. Thus help to decongest overcrowded courts and accelerate access to justice, while contributing to security and economic growth in the country (Uwazie, 2011).

6.8 Conclusion and Recommendations

Mediation was successfully used resolve the Olkaria IV geothermal project implementation conflicts. However, the process was encumbered with the inadequate contribution of the PAPs, its protraction, and misinformation, negativity, and trust issues. The delegates' lacked a clear pathway for dissemination of information among the PAPs. Expectations were unsatisfactorily met because of the variations with the knowledge, attitude, and practice. Mediation lessens suspicion among the PAPs, and increases the community's exposure to different conflict resolution opportunities. An awareness campaign before mediation as an effective preparation tool and suitable engagement of the aggrieved parties, would improve the efficacy of the mediation exercise.

CHAPTER SEVEN: SUMMARY OF RESEARCH FINDINGS, GENERAL DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

7.1 Summary of the Research Findings

The development of the Olkaria IV geothermal project elicited socio-economic, environmental, cultural and political conflicts between KenGen and the PAPs. These conflicts were triggered by the inadequate sharing of information, and PAPs' participation in decision-making process in regard to project design, the PAPs' relocation and the compensation they would be awarded. The conflicts effects on PAPs were dire and were managed mainly thorough competition, where the PAPs were pressured into agreement, and avoidance approaches, where the PAPs involuntarily relocated. Also, the PAPs agreed to relocate, in consideration of the project's aim of generating electricity towards the national grid. There were attempts to resolve the stalemate between KenGen and the PAPs through meetings in vain. This was demonstrated through the subsequent discontent and agitation by the PAPs upon relocation that nearly delayed the implementation of the project.

The PAPs wrote letters to the project donors, that is, World Bank and European Investment Bank, seeking their intervention. This resulted in the investigation of PAPs' complaints through the World Bank Inspection Panel. This panel recorded genuine complaints from PAPs. However, considering the importance and the aim of the project which was part of KEEP and climate mitigation, mediation was recommended by the project financiers to allow the parties to resolve issues and foster peaceful co-existence and long relationships.

The mediation process was held in three phases, i.e., pre-mediation, mediation and post-mediation. Twenty-seven issues of contestation were identified and negotiated. Consensus on

these issues was reached between KenGen and the PAPs, and the mediation agreement was signed. Mediation led to reduced conflicts, improved relationships between KenGen and the PAPs, and among the PAPs, and improved PAPs' livelihoods through opportunities within Olkaria IV project and the RAPland.

However, although the mediation process was successful, the process was faced with a few issues. This included, the inadequate PAPs' participation in the process, knowledge, attitude, and practice, mediation's protraction, and distrust, which if assumed, would reverse the gain already made. There is a need for improvement in mediation process to enhance its efficacy, and guarantee sustainability of the agreement.

To understand what conflicts dynamics emerged from the implementation of developmental projects, this study employed the administration of semi-structured questionnaire which targeted the entire population that was relocated to RAPland. This aimed at gathering individual households' experiences. The insights were gathered on communication received regarding the project following the results of the ESIA and relocation of the community. Project information also included the numerous benefits including financial compensation, employment opportunities at the project site, and scholarships/bursaries among others, that the PAPs would have received. The reasons for community opposition, conflict escalation and management were also sought. Further, focus group discussions and key information interviews were conducted with participants who were purposively selected to gain in-depth information on these subjects.

This investigation elicited socio-economic, environmental, cultural and political conflicts. Conflicts were linked to inadequate sharing of information, and PAPs' participation in decision-making process in regard to project design, the PAPs' relocation and the compensation they

would be awarded. This demonstrated a continued lag in enforcement of a requirement for adequate public participation which is a constitutional right in the country. It is definite that the application of coercion and avoidance as the main conflict management strategies were inadequate. This was attributed to subsequent dissatisfaction on the part of the PAPs, and conflicts that persisted beyond relocation. Thus, a need for a more effective approach to conflict management like mediation towards peaceful co-existence between developers and the PAPs, and a further need for testing these approaches. Thus, this objective was met.

The study also documented and appraised the three phases of mediation processes, and its role in resolving conflicts that emanated from the implementation of Olkaria IV geothermal energy project. The responses gathered through household surveys, focus group discussions, key informant interviews and field observations elicited mediation's best practices including, the PAPs selection of their representatives in mediation, and competent mediators with good probing and listening skills. It's evident that these practices promoted the ownership of the mediation processes by the parties, and also accorded them a conducive space to voice their issues leading to consensus on thorny issues, and signing of the agreement. In addition, the reduced conflicts, mended relationships between parties and improved PAPs livelihoods that smoothened project operations, demonstrated the effectiveness of mediation in resolving natural resource conflicts, presenting a need to out scale its use. Thus, the objective number one was met.

On the flipside, the evaluation of mediation processes through semi-structured questionnaire on the entire population at RAPland, focus group discussions and key informant interviews raised the challenges that encumbered the process and the lessons learnt. These included inter alia, inadequate participation of the PAPs in the processes, occasioned by both the

improper design of the mediation that failed to provide for a proper consultation, and feedback arrangements by the PAPs, and less empowered community representatives, knowledge, attitude and practice. It is certain that the mediation procedural issues contributed to a dissatisfaction of process by nearly half of the respondents, a possible threat to longevity of the mediation agreement. This presents a need for a continued documentation and evaluation of the mediation process to identify gaps, and for their resolution and sustainability of the mediation pact. Thus, objective three was met.

7.2 General Discussions

Global realities demand transition to use of renewable energy whose developments are sometimes large-infrastructure that take up space and interfere with socio cultural and economic affairs of affected communities (Kardes *et al.,* 2013). Consequently, in Kenya, where renewable energy is prioritized, geothermal energy development is key within its Vision 2030, of moving the nation into newly industrialized, middle-income State by the year 2030, the SDGs and Africa Agenda 2063 (The Energy Act, 2019).

In this light, the installations of Olkaria IV geothermal plant resulted in the displacement of the community, and conflicts with KenGen mainly over the socio-economic, cultural, political and environmental concerns. As elsewhere, in East Africa, tensions arose within the project between large-scale infrastructure development and communities (Unruh *et al.,* 2019). There also was environmental degradation concerns and heightened, probably unrealistic PAPs expectations. Their occurrence demonstrated lapses in planning for project implementations.

The key socio-economic concerns at Olkaria IV, hinged around decline in capacity to keep livestock, which was the primary source of livelihoods for majority of the households. The

community relied on cattle trading at the local markets including, Suswa to raise income that was used to meet livelihood needs (Sani *et al.,* 2021). The loss of this capacity had potential to adversely impact on the household's ability to meet livelihood needs, cause frustration and displeasure among the PAPs, and escalate project resistance. In addition, the livestock reduction could potentially escalate intra and inter-community conflicts, cattle rustling, due to a common coping tactic among the pastoral communities to boost livelihood access (Malley *et al.,* 2008; Schilling *et al.,* 2018). This would have aggravated the existing tensions with possible negative spillover effects to the project's activities within the community.

The project had additional setbacks for the community including increased distance to the market centres of Kamere, Naivasha and Suswa. Consequently, more time and financial resources were devoted to travelling, reducing the budgetary allocation to other competing needs like food and clothing. This had potential to broaden common household disputes over basic needs. Also, the increased distance, may have negatively impacted on income streams connected to tourism activities at the former settlement. Perhaps, the residents were forced to operate for shorter hours (open late and close early) or failed to open, because of lack of transport. Thus, a decline in income especially for the members of Cultural Centre Village, whose main livelihood streams were supplemented with tourism activities. This result reveals possible further soured relationships among PAPs households where women and children are likely to suffer more.

However, the complete conversion of pledges to actions by KenGen including, the financial compensation and improved road networks among others, could have helped counter the PAPs financial constraints, and prevent conflicts as also demonstrated in geothermal projects in Philippine (De Jesus, 2005). In this light, De Jesus (2005) recorded social issues raised against

geothermal projects in Phillippine since 1990's as physical and economic dislocation of settlements, lack of consultation and benefits among others.

To address these concerns, the PNOC Energy Development Corporation (PNOC EDC) responsible for the project management, adopted measures, including awareness and acceptance campaigns, opening up communication and translating commitments into action that facilitated smooth operations of the established geothermal projects. Notably, to gain stakeholder acceptance for the thermal projects, the company prioritized the actual implementation of the commitments made during the information drives (De Jesus, 2005). The committed measures became part of the standard procedures in field operation. The measures played important role in reducing conflicts and smoothened the projects' operations (De Jesus, 2005), a practical evidence of translating pledges to actions and conflict reduction, that could also help development projects from community opposition beyond Kenya.

The socio-economic conflict, was the most dominant conflict since the development failed to prioritize the community's wellbeing to minimize conflicts. Notably, the community diversified its livelihood sources, including crop farming (vegetables, maize, beans, pawpaws, pumpkins, sugarcane and bananas), and poultry keeping, that were enabled by the improved services at the new site including provision of water points, and reduced the hurting in those who regretted moving.

Further, restricted access to KenGen's land, may have resulted in further dispute over access to pasture and impoverishment of the PAPs. The erection of the fence around the plant's area meant cutting off the PAPs' access to grazing (Melubo & Lovelock, 2019; Ogwang *et al.*, 2018). While the restricted access could interfere with the livestock migration routes, further

conflicts were likely to emerge over competition for the scarce pasture within the community land as also predicted over a decade ago by (Maathai, 2010) in the Challenges for Africa.

Confirming this argument, a study on local to global perspective on oil and wind exploitation, resource governance and conflict in the Northern-Kenya by (Schilling *et al.,* 2018), revealed that the community drove their livestock into fenced-off areas of Tullow to access the grass within the premises. Damages to these premises were inevitable, triggering conflicts between the community and the developer, the likely case for the Olkaria IV. This finding demonstrates the need for improvement in ESIAs, which should have forecasted this matter and properly incorporated participatory demarcation of fenced-off areas to help avoid such conflicts. This would improve the daunting perception of ESIAs and RAP reports claimed to be biased towards project implementation at the expense of laborious and critical examination of how to reduce the undesirable impacts while maximizing the profits (Unruh *et al.,* 2019).

While the community was excited over the ownership of the modern houses at RAPland, foresight planning would have provided relocation units compatible with traditional *manyattas* to increase tolerability and reduce cultural concerns over housing. However, the PAPs' appreciation of the modern houses, and diversification of the livelihood sources, including crop farming and poultry keep is perhaps an indication of the gradual erosion of the Maasai's nomadic pastoralism and cultural values as also alluded by (Njeru, 2011).

The women's inadequate participation in the decision-making process, reflects a possible continued marginalization of this gender in similar settings in the community. It is a clear demonstration of little change in the status of women in the study community, where women are accorded equal status with children, as it had been observed over twenty years ago (Hodgson,

1999). In contrary, the Constitution of Kenya, 2010 Chapter Four on the Bill of Rights provides for the inclusion of women in decision-making process from grassroots to the national level (Grillos, 2018), a possible affirmation of the challenges in its realization, in the communities.

RAPland's first impression of a dry and frequently visited by drought, characterized by valleys, gullies, loose volcanic soils and wild animals, is the probable reason for the PAPs' discontent and conflicts. Perhaps this result underscores the need for the projects to consider and comply with the World Bank Environmental and Social Safeguard Policy, on the need to resettle PAPs on the land that restores or improves their livelihoods, if environmental conflicts have to be minimized.

However, while the PAPs had an option to select a different site, their acceptance to settle on RAPland, was perhaps essential necessary evil because its proximity to the project site would facilitate continued relations, and benefits from the project, showing that the community valued livelihood gains over ecological concerns. The PAPs' refutation of claims of a choice to settle on alternative land demonstrates a possible lack of proper consultations between KenGen and the PAPs regarding resettlement land, a clear weakness in governance of the projects (Mensah & Okyere, 2014).

In their article 'Why do some communities resist mining projects while others do not,' (Conde & Le Billon, 2017) suggested that the community is likely to object the project as soon as they start experiencing the adverse impacts which, results in their lack of trust in the firm's ability to run its activities without impacting on their livelihood sources. In this light, the PAPs at Olkaria IV may not have readily comprehended the impacts of project on their health, since such impacts occur long after the project is implemented.

Similarly, to the Niger Delta resource-based conflict which, revolved around oil exploration in the region, the residents were exasperated by the extensive environmental degradation, and underdevelopment emanating from the extraction of oil, resulting in the collapse of the oil company (Boele *et al.*, 2001; Kron & Jensen, 2016; Oseremen, 2016). However, environmental impacts and socio-economic aspects are intertwined. For instance, contaminated grazing land would potentially result in low production and death of livestock, which is the community's main source of livelihoods. This would impinge on the households' ability to put food on table, and further impoverishment and conflicts, issues that could be avoided with improved RAPs' and EIAs/ESIAs.

The Olkaria IV project demonstrates that the failure to adequately incorporate the PAPs' opinions during project decision-making processes, would potentially result in political conflict (Hedström & Smith, 2013). Whereas, the Constitution of Kenya 2010, Article 10 provides for the national values and principles of governance, whose application in developmental projects would encourage equality of opportunity, virtuous interactions, harmony and nonviolent co-existence, the Olkaria IV study results, reveal a serious level of slackness not only on the part of the developer, but also the community representatives in matters relating to PAPs' consultation.

The FGDs' claim of their preference for an alternative site, is a clear gesture of possible inadequate consultations in decision-making processes during the project design and relocation phases, as also observed in the mining project in Ghana by (Mensah & Okyere, 2014). More evidence of governance issues includes the alleged inadequate and improper sharing of information on project impacts with the PAPs, a matter also reported in extractive industries (Conde & Le Billon, 2017). The accountability issues at Olkaria IV included the purported non-

actualized promises including stabilization of the gulleys (which seemed untenable due to the loose volcanic ash soil type), settling of the disturbance allowance, and unfurnished houses, a likely threat to the mended relationships.

The results collaborate study on new oil developments in remote areas: environmental justice participation in Turkana, Kenya (Mkutu *et al.*, 2019). These authors suggested that the community members were disgruntled, protested and disrupted the oil and gas company's operations over exclusion from decision-making and benefit-sharing arrangements. This was exacerbated by their alleged sidelined interests by elite capture and a strong national development agenda supported by international actors, the thinkable scenario in Olkaria IV case.

The observations are a testament of the continued struggles towards inclusivity in developmental projects to address conflicts, a probable threat to their sustainability (Amavilah *et al.*, 2017). In reference to the three legged stool analogy (Maathai, 2010), governance is one of the key components should sustainability and stable society be realized, alongside sustainable environmental management, and a culture of peace. Yet, conflicts arising from governance issues, especially participation in decision-making processes persists in developmental projects, which should be addressed.

The post-relocation conflicts at Olkaria IV underscore the importance of translating the pledges to actions, which seems to be recurrently overlooked by the developmental projects (Schilling & Scheffran, 2018). Also, the possible inadequate participation of the PAPs in the negotiations of RAP revealed by Olkaria IV mediation, demonstrates a probable trend occasioned by the disparities in power between antagonistic parties (O'Meally, 2014). In this case, the PAPs which had less say, perhaps comprised their interests for the former settlement

and relocated, maybe for fear of KenGen's possible retaliation. This would result in unimaginable and dire repercussions especially where the relocation involves a larger community.

The mediation's minimal awareness among the community in Olkaria IV could have been because of the low application of mediation in Kenya (Muigua, 2016). However, its use replicated practices elsewhere, especially in Indonesia, where it has primarily been used following the parties' failure to resolve their conflicts (Moore, 2014; Ni'mah *et al.,* 2018). The WB had an option of implementing its inspection panel's recommendations that would have perhaps increased KenGen's cost. However, its acceptance to adopt the mediation as provided for in the EIB's complaints handling mechanism demonstrated the appreciation for the ADR mechanism that would have resulted in the win-win outcome for the parties, mended relationships and ease project implementation.

Although the PAPs were uncertain about the mediations fairness at its inception following the perceived fiscal connection between KenGen, and the project financiers, who were driving the mediation process, their acceptance of the mediation, and also the mediators' was conceivably an essential element of the Olkaria IV mediation's success, resonating (Bercovitch & Jackson, 2001; Dhiaulhaq *et al.,* 2018; 2015)'s observations. Perhaps, the acceptance might have been driven by the parties' (KenGen and PAPs') wish for peace and harmonious co-existence, similarly to the case of the industrial tree planting conflict mediation in Indonesia (Samsudin & Pirard, 2014), where the parties wished for quicker resolutions.

In Tanjung Jabung Barat mediation in Indonesia, the community was apprehensive over probable partiality following the mediator's involvement in the development of company's social

conflict management system. However, the community accepted the mediator, courtesy of the mediator's capability to negotiate with the company's decision-makers, the thinkable case in Olkaria IV. Similarly to South Asia mediations (Dhiaulhaq *et al.,* 2018; Samsudin & Pirard, 2014), the Olkaria IV PAPs' motivation for resolutions to the conflicts was a possible pre-requisite that facilitated the mediation's success. In additional, it could have been that the conflicts at Olkaria IV had ripened. Zartman (2001) suggested that successful resolution of conflict is based on when the resolution efforts are made, and when the parties are ready to resolve their conflict (Zartman, 2001), the likely case for Olkaria IV.

Whereas, the mediators worked with KenGen and the PAPs, and ensured their commitment to mediation resulted in the signing of the agreement, a pre-mediation of the community interests could have perhaps helped to prevent the argument that occurred between the parties during negotiations. Otherwise, this would have threatened the realization of the agreement. The Tanjung Jabung Barat's previous mediation failed because of the engagement of junior staff, incapable of making final decisions to drive the process (Dhiaulhaq *et al.,* 2018), affirming the importance of competent mediators in Olkaria IV.

The Olkaria IV mediation phase was more inclusive, an essential element for a more sustainable agreement since the PAPs' representatives consulted the larger community. This was contrary to the mediation cases in South Asia where the community representatives played a more prominent role in decision making (Bercovitch & Sigmund, 2006; Dhiaulhaq *et al.,* 2015). Perhaps, the small size of the PAPs (about 1209) in Olkaria IV (Schade, 2017) made it more consultative. However, most feedback was reportedly discarded, maybe because of the less empowered representatives, and the mediator's desire to conclude mediation within the

financier's timeliness. This is a common scenario in funded projects or characteristic of successful projects that adherence to schedule (Osei-Kyei *et al.,* 2017), but yet remain a threat to the sustainability of the mediation agreement.

Nonetheless, the Olkaria IV mediation also resulted in the signing of agreements with subsequent socio-economic benefits. Socially, the mediation realized mended relationship between KenGen and the PAPs, and among the PAPs at RAPland. Also, a reduction in conflicts was an evidence of successful mediation. Economically, the PAPs' livelihoods improved through provision of employment to some PAPs, and diversified livelihood sources including crop-farming supported by the improved water supply at RAPland. KenGen's willingness to negotiate the post-relocation conflicts, and the PAPs acceptance of the mediated bid resulted in this win-win outcome, an important feature of the mediation's role (Bush and Folger, 2005; Dhiaulhaq *et al.*, 2014, 2018; Vindeløv, 2012; Wall *et al.,* 2001).

Although the Olkaria IV mediation's results were desirable, its process encumbered challenges and lessons. The failure in sufficient representation which resulted in, in-exhaustive consultations with all the PAPs, could have threatened reaching an accord. The Constitution of Kenya, 2010, Article 10 provides for the right to participation by all citizens. Perhaps, a pre-mediation should have ensured objective selection of the community representatives and their sufficient empowerment to negotiate on behalf of the community.

Also, the power imbalances between the parties could have led to the PAPs' inadequate involvement resulting in their likely subjugation. This would have resulted in rapid results, with unresolved contentious issues such as the required number of households, yet counter-productive as observed in Darfur peace talks (Nathan, 2009). Maybe, the supposed fast-tracking of the

process aimed at cutting down on the mediation costs venue, food, accommodation and participants' financial compensation, to improve mediation's efficiency, yet a threat to implementation of the agreement.

Notably, the community's participation is primary across all mediation stages. Their involvement enhances the commitment to the deal and improves the community's attitude towards sustainable project execution as also observed by (Cheng *et al.,* 2019) in sustainable tourism development. Thus, a recognizable attribute to effective mediation, which could be attained with the well-empowered representatives. Mediation research reviews observed that when it is effective, the parties would be satisfied, and the compliance to agreement would be high (Carnevale & Pruitt, 1992), and adequate consultations during mediation process would help attain this.

The community's high prospects for the mediation exposed the inadequacy of the process to envisage capacity to fulfill agreed upon demands, and to manage PAPs' optimisms. However, the PAPs' accepted the mediation results, regardless of the supposed failure to compensate an estimated USD 5,000 as disturbance allowance for instance. Perhaps, this realization was motivated by desire for peace, similarly to the forest resource conflicts mediation in South Asia (Dhiaulhaq *et al.,* 2018). In this case, the agreement was much less than community's original demands and terrestrial entitlements, exhibiting the residents' ability to manage expectations.

The PAPs' claimed that there was oppression in Olkaria, and some incidents of manipulation by the developer and mediators in a dictatorial way, thus frightening them from pursuing full rights during negotiations. However, the disagreements and betrayals among the delegates could have also hampered their bargaining authority resulting in failure to agree on

disturbance allowance, for instance. The power of continued collective-action and effective campaigns changed the power relations between parties, and improved the parties negotiating influence in Central Java, Indonesia (Maryudi *et al.,* 2016), an enabling condition for resolution of conflict (Zachrisson & Beland, 2013). Numerous plantation conflicts in Indonesia remained unresolved prompted by substantial power asymmetries (Afrizal & Anderson, 2016), affirming the value of improving procedural equality in mediation processes.

7.3 General Conclusions

The Olkaria IV geothermal project development by KenGen encumbered community opposition due to their discontent in regards to socio-economic, environmental, cultural and political aspects. The PAPs dissatisfaction was triggered by the inadequate information and participation in the decision-making process on project design, the PAPs' relocation and compensation. The conflicts effects on PAPs were dire and were managed mainly via competition, where the PAPs were pressured into pacts and avoidance approaches, where they involuntarily conformed. Subsequent dissatisfaction on the part of the PAPs led to unrest that almost derailed the project. Mediation resulted in signing of the agreement between KenGen and the PAPs on contentious issues. Mediation led to reduced conflicts, improved relationships between KenGen and the PAPs, and among the PAPs, and improved PAPs' livelihoods through opportunities within RAPland and at Olkaria IV project site, revealing mediation's effectiveness in resolving developmental conflicts. Thus mediation was a better option to conflict resolution. The selection approaches for the community representatives lacked sufficient consultation with the larger community. If it had been, as a best practice, PAPs' interests would have been better taken care of and ownership of the process more assured. However, the mediators' expertise, good listening

and probing skills resulted in successful negotiations and agreement on diverse issues. The freedom of expression created through ensuring women and youth's participation and mediation clinics, promoted the weaker gender's voice into mediation that helped sustain the agreement. Although, mediation was successful, there is room for improvement. Mediation encumbered procedural issues including inadequate PAPs' knowledge, attitude and contribution. It was protracted and created mistrust among the PAPs and between the protagonists, which could have compromised acceptability and sustainability of the mediation results.

7.4 Recommendations

i. There is a need for the project planners and developers including the government, parastatals and private sector among others to promote adequate involvement of the community in the design and implementation of large development projects. This will secure community buy-in, reduce the number of unrealistic pledges made by the developers and moderate expectations on the part of the community, and thus oil project implementation.

ii. Project implementers like KenGen should consider a prior negotiation strategy that ensures sufficient participation of members of the community for a resettlement action plan (RAP), before relocation of the community to pave way for the project. This would facilitate ownership of the RAP by the community members and their cooperation during implementation, minimize conflicts and related costs.

iii. In regards to conflict resolution, mediators should ensure adequate prior capacity building among community representatives to enable satisfactory representation of the community members at peace tables. A strategy for comprehensive feedback and reporting

mechanism with the community; should be created before mediation commencement.

iv. Researchers and mediation practitioners should continue to document and appraise mediation processes to enable construction of best practices for future application.

v. The policymakers should consider formulating policies for out-scaling the use of mediation as alternative dispute resolution mechanisms in implementation of developmental projects.

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8.0 APPENDICES

8.1 DATA NEEDS

Objective	Data collected to address the objectives	Source of this data	How data was collected the source	Actions/materials/resources used
To evaluate the dynamics of conflicts that arose from the implementation of the Olkaria IV geothermal project.	The understanding of conflicts by communities, the issues that triggered the conflicts, how conflicts started, nature/type of conflicts, stakeholders involved in the conflicts, drivers of the conflicts, effects of conflicts, how conflicts were addressed, who addressed conflicts and what roles they played	Households FGDs Key informants Mediation reports & related literature	Use Semi-structured questionnaire to conduct household surveys Checklist – FGDs Checklist – Key informants Review of mediation reports & related literature Voice recording	Printed questionnaire. Pens, flip charts. felt pens, strings, note book, voice recorder, camera enumerators/interpreter/rapporteur, guide, internet/bundles
To document the mediation process and appraise its role in resolving the geothermal project implementation conflicts.	Understanding of mediation, when mediation started, how mediation was initiated, who initiated mediation? Steps of mediation, stakeholders involved and their roles, period of mediation, how mediation helped to resolve conflicts, extent to which mediation resolved the conflicts, factors contributing to the success of mediation, results of mediation, effects of mediation on households, communities' perception towards mediation	Households FGDs Key informants Published and unpublished literature on mediation Mediation reports Newspaper articles Internet Observation	Household surveys, focus groups, key informants interviews, review of mediation reports & related literature, photography, voice recording (only with consent)	Printed questionnaire. Pens, flip charts. felt pens, strings, note book, voice recorder, camera enumerators/interpreter/rapporteur, guide, internet/bundles
To evaluate challenges and lessons of mediation in resolving conflicts that arose from implementing the Olkaria IV geothermal project.	The challenges of mediation process, how the challenges were addressed, the loopholes of mediation process, how the loopholes would have been avoided, lessons drawn from the mediation experience, acceptability of mediation	Households, FGDs, Key informants, published/unpublished literature on mediation, mediation reports, newspaper articles, internet	Household surveys Focus groups Key informants interviews Review of mediation reports & related literature Voice recording (only with consent)	Printed questionnaire. Pens, flip charts. felt pens, strings, note book, voice recorder, camera enumerators/interpreter/rapporteur, guide, internet/bundles

8.2 QUESTIONNAIRE

HOUSEHOLD QUESTIONNAIRE NO. ☐ DATE: _____/_____/2019

My name is Lilian Namuma S. Kong'ani of the, University of Nairobi. I am a Ph.D. student at the Wangari Maathai Institute for Peace and Environmental Studies. We learnt of the mediation exercise that you went through and how it has been of benefit to you. We would like to learn how future mediation exercises can be modeled on this one to make future resettled communities satisfied with their relocation. The questions we ask will assist in making clearer the role, the process, uptake and sequel of mediation in resolving your conflicts. They will also help in replicating the Olkaria mediation experience in resolving other large project implementation conflicts. The respondent households will be selected randomly with the help of the Village Elder. All the information that you provide is for the academic use only and will be treated with confidentiality and will not be directly attributed to you at any time. Your participation is voluntary and you may stop this interview at any moment. Kindly allocate us some time and help respond to the questions. Please allow us to use 30 minutes of your valuable time for this interview.

Note:

- ***Household selection criteria - a household based in RAPLAND***
- ***Definition of a household - people living together day in day out and eat from the same pot***
- ***Do not ask questions that are obvious like the gender of the respondent?***
- ***Make the interview interactive and incorporate probing skills***

SECTION A:

1. Name of the Village
2. Name of the Respondent (Optional)
3. Mobile number of the respondent (Optional)

Table 1: Household (HH) Characteristics

1.1 Are you the head of the Household? ***1 = Yes 2 = No***	1.2 Gender of the respondent ***1 = Male 2 = Female***	1.3 How old are you?	1.4 Respondent's highest level of completed education ***code[4]***	1.5 How many people are members of your HH?	1.6 What is your marital status? ***code[6]***

code[4], *1 = Primary, 2 = Secondary, 3 = College/Vocational Training, 4 = University, 5 = Never been to school*

code[6], *1 = Married, 2 = Divorced, 3 = Widow/widower, 4 = Single, 5 = Other (specify)*

4. What are your livelihood activities?

5. What is the most important livelihood activity from those listed in **No. 4**?
6. How do you compare your livelihoods now and before relocation to RAPLAND? ***1=Same, 2= Increased, 3= Declined, 4= Other (please specify)***

SECTION B:

The implementation of Olkaria geothermal project

7. How did you learn about the Olkaria IV project? ***(1=radio, 2=print media/newspaper, 3=KENGEN, 4=Village Elder, 5=Community Leader, 6=Neighbour/Friends, 7=Other (please specify)***
8. What information did you receive about Olkaria IV project?
9. What was your reaction about the information regarding the project?
10. How long did it take from hearing about the project and your relocation?
    1=One week, 2= One month, 3= Six months, 4=One year, 5= other (please specify)
11. Could you please describe the preparations for relocation? *(What did KENGEN do, what did you do, did you visit the relocation site first? please describe?*
12. Do you think that KENGEN should have prepared you better for relocation? ***1=Yes, 2=No***

12.1 If **yes**, please State how KENGEN should have prepared you better

13. Did you feel like resisting the relocation? ***1=Yes, 2=No***

13.1 ***13.1*** If **yes**, what was the main objection to relocation?

14. Did you join with others to resist or develop a resistance plan? ***1=Yes, 2=No***

14.1 If **yes**, how?

15. What was the nature of resistance? *(Was it verbal? to who? was it community organized? who did they address? was it violent?, against who?, was it a demonstration? did the police come?, was there tear gas?)*
16. How did KENGEN react to your resistance or protest?
17. How did resistance process affect your livelihoods?
18. How was the situation addressed?
19. Who was involved in addressing the situation and what was their role? *(Within the community, Government, KENGEN, other (please specify)*
20. If you were to be moved again or in cases where another community has to be moved, would you recommend the same process to be followed?
    1=Yes, 2=No

    20.1 If **No**, how different would you recommend the process to be done?

SECTION C:

The role, the process, uptake and sequel/result of mediation in resolving the geothermal project implementation issues

21. Had you heard of use of mediation to resolve conflicts before the 2015 mediation? ***1 = Yes, 2 = No***
22. If **yes,** where did you hear or learn about mediation?

23. How had mediation been used? *(Was it effective?)*
24. How was mediation that started after relocation in 2015 conducted?
25. Could mediation process have been done better? ***1=Yes, 2=No***
    25.1 If **yes**, how?
26. What issues were mediated?
27. Who were the participants of mediation process?
28. How were the participants **from the community** selected?
29. Could the selection have been done better? ***1=Yes, 2=No***
    29.1 If **yes**, how?
30. Did your household participate directly in the mediation process? ***1=Yes, 2=No***
    30.1 If **No**, who represented your household?
31. As a household/woman/youth, do you think that you were well represented? ***1=Yes, 2=No, 3=Other (please specify)***
32. How were you given feedback?
33. Could it have been done better? ***1=Yes, 2=No***

33.1 If **yes**, how?

34. What were the results of mediation? *(mutual agreement between community and KENGEN, signing of agreement etc)*
35. How were the mediation results communicated?
36. How did mediation benefit the community?
37. What **did you not** get from mediation?
38. How has mediation impacted on your mindset/attitude?

SECTION D:

Challenges and opportunities of mediation in resolving the geothermal project implementation conflicts

39. Were there any challenges during the mediation process? ***1=Yes, 2=No***
    39.1 If **yes**, what were these challenges?
40. How were the challenges addressed?
41. Would you recommend the use of mediation to resolve conflicts in any other community? ***1=Yes, 2=No***
    41.1 If **No,** why?
42. What lessons can your household draw from the mediation process?

Thank the respondent for according their valuable time and responding to the questions

#END#

8.3 FOCUS GROUP DISCUSSION CHECKLIST

Focus Group Discussion Checklist

1. How did the community learn about Olkaria IV geothermal project?
2. What information did you receive about the project and how did the community think of it?
3. Could you please describe the preparation for relocation?
4. How was the relocation process handled? Was it satisfactory? If not, how could it have been improved?
5. How was the conflict manifested? Who/nature/effect?
6. How was the situation addressed?
7. If it were not for mediation, how do you think the situation would be as at now?
8. How was mediation conducted?/role of mediation?
9. What should have been be improved?
10. What were the challenges of the mediation process?
11. What was the community's expectation of mediation?
12. What lesson(s) can we learn from Olkaria IV mediation?

8.4 KEY INFORMANT CHECKLIST

Key Informant Checklist

1. Could you please describe the conflict that resulted from the implementation of Olkaria IV geothermal project?
2. What were the contentious issues between KenGen and the PAPs? Why do you think the issues escalated?
3. How were the issues addressed? To what extent were the issues resolved?
4. Could you please describe the mediation process? When? How? Who?
5. What was the role/conduct of the mediators?
6. What were the positive results of mediation?
7. What were the negative results of mediation?
8. What were the challenges of the mediation process, and how were they addressed?
9. What lessons can we learn from the Olkaria IV geothermal project mediation?
10. What's your perception of mediation in regards to resolution of conflicts?

8.5 PLATES

On the left, a Research Assistant sketching RAPland map showing OlooNongot, OlooSinyat, OlooMayana Ndogo and the Cultural Centre villages and key facilities. On the right, is the RAPland scenery

On the left, a Researcher in the one of the PAPs' garden with fruit trees and sugarcane. On the right is a PAPs' garden with bananas, pumpkins and other vegetables)

One of the Livestock drinking point at RAPland

A standard two-bedroomed house with a pit latrine