



**UNIVERSITY OF NAIROBI**

**SCHOOL OF JOURNALISM AND MASS COMMUNICATION**

**PRINT MEDIA COVERAGE OF GEOTHERMAL ENERGY IN KENYA:  
A CASE OF *THE NATION* AND *THE STANDARD* NEWSPAPERS**

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**DECLARATION**

I, the undersigned, hereby affirm that this project is my original work and has not been previously presented, in part or wholly, to any other institution of learning for the award of any degree or examination.

Signed .....

Date .....

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

Signed .....

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## **DEDICATION**

I dedicate this research project to my family for the emotional support and encouragement towards my study.

## **ACKNOWLEDGEMENT**

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## ABSTRACT

This study sought to examine the print media coverage of geothermal energy with reference to *the Nation* and Standard newspapers for the period July 2017-June 2018. The objectives of the study included: to determine the frequency of geothermal coverage by *the Nation* and Standard newspapers within the specific period, to analyse priming of geothermal energy stories by *the Nation* and Standard newspapers and to identify the specific issues regarding geothermal energy that is frequently covered by *the Nation* and Standard newspapers. The study was grounded on three theories; Agenda setting theory, Agenda priming theory and Agenda building theory. This study adopted a content analysis with the mixed methods approach. All geothermal energy stories in both newspapers formed the sample size for this study and purposive sampling method was used to get the stories; code sheet was used to get the quantitative data while thematic analysis was used to get the qualitative data. Quantitative data was analysed and presented through tables whilst qualitative data analysed through reading and coding of themes and presented through the narration style. The study established that both newspapers covered geothermal energy inadequately confirming reports by some authors. The findings of the study included less coverage by both newspapers with limited prominence given to geothermal energy stories and the issues that stood out during reporting of geothermal included; cost, time, partnerships, land and economic social development. Based on the above findings, this study recommended the following: the print media through their editors should allow more geothermal energy stories to feature in their publications and since geothermal energy is a vital technology in the growth of the energy sector then more prominence be given to geothermal stories. The research also recommends that the media entity should involve more partners and get them to write and simplify what and how exactly geothermal and other renewable energy would benefit the development of the country. This research suggests similar study deriving samples from all the local newspapers and a longer study period. This would help confirm the consistency of this study's findings.

# CHAPTER ONE

## INTRODUCTION

### 1.0 Overview

This chapter looks into the background of geothermal energy in Kenya, current state of *the Nation* and *The Standard* newspapers, statement of the problem, objectives, research questions, justification scope and limitations of the study and the operational definition of terms.

### 1.1 Background

#### Geothermal Energy in Kenya

Renewable energy resources are energy resources that are unlimited and readily available over time (Quaschnig, 2005). They are an alternative to the use of fossils to generate energy and can smoothly meet the global energy demand without any problem. The different types of renewable energies include biomass, hydropower, geothermal, solar, wind and marine energies (Demirbas, 2006).

Geothermal energy is a form of clean energy that utilises the heat confined in the inner core of the earth's inner spheres (Barbier, 2002). It is a form of energy that is environment friendly, naturally replenished and is not affected by the weather hence making it the most reliable renewable energy. It contributes 51% to the national grid and almost 60% to the energy mix and this has seen most of the country's electricity need and other energy needs met through geothermal production. Hydro energy follows at a distant of 21% (World bank Feb23, 2015n.d) and according to data by the Ministry of Energy and Petroleum Resources (2017), geothermal energy production has been on the rise since the year 2013 with a total

production of 415 million KWh in August 2016; this is an upward curve compared to 401 million KWh and 376KWh in the months of July and June respectively with the ministry projecting that geo energy in the country will be generated at 5000MW by the year 2030. Global legal insight 2018 ranks Kenya as the one biggest generators of clean energy worldwide with geothermal energy accounting for a total of 7GW of the total 15GW.

According to The Kenya Electricity Generating Company –KenGen (n.d.), the cost of electricity has dropped to about 7.2U.S cents per KWh making geothermal energy the cheapest form of renewable electricity. The success of geothermal energy, fuel cost charge (FCC) has gone down by 60% and this has resulted to a drop in the cost of electricity to the consumers and business (Saino, 2016). Data from the Kenya National Bureau of Statistics 2017 notes that with the drop in electricity tariffs, houses that used to consume around 200KWh paid about \$36 in September 2017, which is a drop from the \$39 paid in August the same year. In overall the decline in electricity power tariffs added significantly to the decline in inflation. Schools and industries and other organisations are now enjoying cheap electricity, with uninterrupted power supply and also, the region’s biggest economy has not faced a major power blackout or rationing/shortages. A stable and reliable power supply cut down power costs by industries leads to job creation and the rise in industrialisation (Ritcher, 2017). Geothermal energy could be used for other purposes other than electricity production, and this include: heating green houses, bathing, cooling and crop drying (Kinyanjui, 2013).

According to the Energy Regulatory Commission (ERC), geothermal power plants in Kenya are located within the rift valley with the power plants having an estimated potential of between 7000-10,000 MW which is spread over the 14 respective sites. With KENGEN

building three power plants Olkaria 1 (195MW), OLkaria11 (105MW) Olkaria111 (139MW) Olakaria1V ( 150MW) and OlkariaV(140MW).

“The Least Cost Power Development Plan (2008-2028) prepared by the Government of Kenya indicates that geothermal plants have the lowest unit cost and therefore suitable for base load and thus, recommended for additional expansion” according to (Simiyu, 2010). The existing Olkaria Power plants have operated as base load power with an availability factor of more than 95% and therefore saved the country on imported fuel cost and power outages during un-favorable weather conditions. This success is a testimony of the viability of the geothermal energy in Kenya.

Geothermal energy in Kenya is state owned by the government of Kenya and a huge amount of finances in geothermal energy project comes from the government with help from the international arena for example, the European Investment Bank (EIB) and the Multilateral development Banks (MDB) .

Bayer (2015), argues that countries like Rwanda, Uganda, Tanzania and Ethiopia are the next growth countries in terms of geothermal energy. Uganda is also receiving technical assistance from JICA and consultancy services from Kenya. Bayer also reveals that outside Africa, Central America and Asia-Pacific are predicted to be high growth regions.

## **1.2. Role of the Media in Reporting Geothermal Energy in Kenya**

Hamel (2010) notes that unlike broadcast media or any other alternative media; print media has a more discernible role to play in the promotion of societal change due to the fact that it is associated with longer impacts in the minds of the readers. It is also more in-depth in terms of reporting and is even more elaborate in coverage. This statement is echoed by

Njogu (2013) by indicating that print media has become the most effective tool to convey development and any other information to the public as they provide the best display and indepth coverage and in promotion of new technology. The Media can either embrace or repel a technology through the nature coverage and pushing for debate and print media does this by providing space for debate in the newspapers.

Geothermal energy is a new technology which is climate and environment friendly and has made quite some milestones in the development of the energy sector and the economy of Kenya at large. The government plus many other stakeholders are coming up with policies, strategies and forming partnerships to promote and enhance the development of geothermal energy. This has led to geothermal energy making headlines in both the local and international media entities.

The media plays a very significant in each aspect of life and its effect in every part of our lives is very clear, direct and dominating. This statement is certainly true for the issues relating to geothermal energy in Kenya. It is set to inform, educate, create awareness and even provide space for debate.

Dissemination of data by the media is contingent upon having the data accepted and embraced by the selected media, with some of the influencing factors including individual personalities and preference, biases mediated by professionalism, organisation, government and even audience demand. You find that topics like politics, entertainment, sports usually get airspace and more attention even by the audience because the mentioned subjects are considered hot and selling as compared to topics like environment and development; that is usually unbalanced, by accident and infrequent (Kabatesi, 2017). This

usually proves to be a hard hurdle for journalists who have interest in pushing for geo-energy stories and they fear their stories might not pull through and hence they have to rely on conferences by the United Nations Environmental Programs (Wuff, 2014).

Hivos (2017) annual reports says that as much as energy enjoys media coverage; renewables like geothermal energy is usually associated with negative coverage for example the health risks that people living around geothermal sites are facing or even what it will cost the government to drill geothermal wells and seldom cover the benefits or even partnerships undertaken by different stakeholders to ensure geothermal energy thrives for example, the partnership between Japan and Kenya that would see Kenya receive donation from Japan in construction of the Olkaria V Power Plant. (Wuff, 2014) says that journalists writing about geothermal energy and other renewables tend to get information from anyone who is availing themselves for comment instead Wuff suggests that journalist should get information about geothermal energy from credible sources like the ministry of renewables officials, experts at the Geothermal Development in Kenya and other relevant stakeholders. This will ensure that whatever information is reported in the media is factual and objective.

The media is responsible for acculturation of its audiences and it can hasten this process by availing to its diverse audience simultaneous opportunities of geothermal energy stories and by this the audience, policy makers, geologist, the government and every other stakeholder is able to listen and combine the views and sentiments of the other and come up with a policy or even a project that is embraced by all and by this geothermal energy is able to experience growth which translate to socio-economic growth (Zhang, Huang, Su, Zhao, & Zhang, 2014), with media attention proving to be an important indicator of development success.

Print media plays a vital role in linking technical assessment of experts to a more easily, understandable and familiar language of laypersons (Dunwoody & Neuwirth, 1991), by this it means that the media simplifies the technical language used by experts dealing with geothermal energy so that readers can understand and digest the mass flow of geothermal information been fed to them.

It plays a double role in public involvement of policy matters; it is also very evident that how media reports on geothermal energy can greatly contribute to shaping the audience's opinion and perception about geothermal energy (Langheim, et al., 2014). The type and extent of geothermal energy reporting can also mirror and communicate the reader's priorities within the policy development, (McCombs, 2002).

UNESCO bases the concept of "knowledge societies" on four factors: freedom of expression, universal access to information and knowledge, respect for cultural and language differences and quality education for all and so by this, the important role of the media and information and communication skills in creating space to expand access to information (Bass, 2017). He goes ahead to note that media plays a significant role in identifying new innovations to fight poverty. By this, geothermal energy contributes to the national grid and by so in the long run energy becomes sustainable and if energy is sustainable businesses will flourish and lives will improve hence poverty will be reduced. The media plays an important role in developing public understanding of economic, social, and environmental issues which form the three pillars of sustainable development and so, the media could provide a platform for geothermal energy stories and allow experts comment on how geothermal energy will benefit the people and the economy of Kenya at large (Bass, 2017). According to (wood & Barnes , 2007) the media plays some potential

role in promotion of new ideas: raising public awareness about geothermal energy technology and how it benefits a social system, Shifting public opinion, providing an inclusive platform for public debate and scrutinising and holding stakeholders to account.

### **1.3 Statement of the Problem**

In spite of the tremendous contribution that geothermal energy has made in the energy sector and the economy of Kenya at large, print media coverage of geothermal energy is subtle and lacks prominence; this study sought to find out if this statement is true by looking at how geothermal energy has been covered by the two leading dailies in the country for the period between July 2017- June 2018.

The government of Kenya has set up many policies that govern the production and utilisation of geothermal energy in Kenya; this is also in collaboration with many other organisations that are advocating and pushing for development of geothermal energy and renewable energy at large through training and mentorship programs for journalists and editors. Hivos East Africa through their website in 2017(n.d) has collaborated with the academia at the University of Nairobi (school of journalism) to mentor upcoming media persons on how to report and write on renewable energy. Karekazi & Kithuyani, (2003) have written that the utilisation and input of geothermal energy into the national grid has led to reduced power shortage and rationing and therefore leading to the boost in the economy. Kinyanjui, (2013) and Mwai, (2016) have talked of the utilisation of geothermal energy and how industries that have embraced this energy have found it easier and cheaper to conduct their businesses.



The mass media is tasked with providing information about geothermal energy to the public. This information would include: utilisation of geothermal energy in Kenya, the impacts geothermal energy has on the environment, its significance as a renewable energy, cost, availability, sustainability, reliability and the contribution geothermal energy makes in achieving Kenya's vision 2030, Africa Agenda 2063 and internationally SDG number 7. The thrive of geothermal energy in Kenya comes at a time when the world is focusing on how to mitigate climate change by embracing renewable energy sources to produce electricity and other forms of energy in place of fossil fuels (Elliot, 2000).

The government of Kenya in 2008 set up the Geothermal Development Corporation (GDC) to independently oversee the development of geothermal energy in the country. The government also partakes in conferences like The Framework convention on Climate Change Conference of Parties (COP) where they discuss on ways to mitigate climate change and to implement these, each country made a pledge to adopt and embrace the use of renewable energy resources to produce energy and so, annually during this meeting, each member country discuss major milestones achieved in production of renewable energy.

Other Stakeholders include the United Nations Environmental Programs that mentor, trains and encourages journalist to have an interest and write more on environment and green energy. Hivos organisation has also been involved in championing for renewable energy, by holding conferences and roundtables to discuss the state of renewable energy in the country and they have also been involved in the training of journalists on how well to report on renewable energy. All these plus many more advocacies are championed to ensure that the country is consuming clean energy and is energy sufficient, sustainable,

reliable and affordable and all these milestones should ideally be reflected in the media coverage.

In reality, energy as a pillar of development enjoys substantial media coverage but this is relatively not so when it comes to renewable energy and geothermal energy to be precise (Kabatesi, 2017). She goes to note that despite the numerous efforts and advocacy that have been undertaken by the players and the tremendous efforts that geothermal energy has achieved, it is not an appreciated topic and if this persists then audiences are denied vital information about geothermal energy, also, there would be lack of advocacy on what is ongoing, for example: utilisation of geothermal energy, impact of geothermal energy on the Kenyan economy and environment, its contribution to curbing climate change and this means that efforts undertaken by different stakeholders to push for geothermal energy would have gone to waste.

It is with this background that this study sought to find out why even after all these efforts by all stakeholders involved, geothermal energy is yet to be given prominence in the media. This will be done by looking at the two local dailies in Kenya. This is with the goal of identifying specific gaps and proposing ways in which such gaps can be addressed.

The need and significance of this research is that all facts, efforts, advocacy, initiated and even completed projects, social and economic viability is useless if geo-energy is not adequately characterised in a factual and truthful reporting, this in which the media plays a vital role.

#### **1.4 General Objective of the Study**

To find out the print media coverage of geothermal energy in Kenya: A case of *the Nation* and *The Standard* newspapers.

##### **1.4.1 Objectives of the Study**

1. To determine the frequency of coverage of geothermal energy by *the Nation* and *Standard* newspaper in the period July 2017- June 2018
2. To analyse priming of geothermal energy stories by *the Nation* and *the Standard* in the period July 2017- June 2018
3. To identify the specific issues regarding geothermal energy that is frequently covered by *the Nation* and *the Standard* in the period July 2017- June 2018

#### **1.5 Research Questions**

This study has been conducted in light with the following research questions.

1. How frequent did *the Nation* and *the Standard* report on geothermal energy in Kenya in the period July 2017- June 2018?
2. How did *the Nation* and *Standard* newspapers prime geothermal energy stories in the period July 2017- June 2018?
3. What are the specific issues regarding geothermal energy got reported by *the Nation* and *the Standard* in the period July 2017- June 2018?

#### **1.6 Justification of the Study**

The world right now is focusing on how to mitigate climate change through the use of renewable energies. Kenya has embraced the use of renewable energy and geothermal energy has proved to be the most utilised renewable energy in the country (Demirbas,

2006) and Ritcher, (2018) points out that geothermal utilisation in Kenya is a very vital component of Kenya's move towards curbing climate change and ensuring that the country is energy sufficient. Kenya's embrace and adoption of geothermal energy is a key indicator toward the progress of attaining its Vision 2030, the African agenda 2063 and internationally the SDG goal no 7 and has led to the rapid growth of the energy sector in Kenya. Geothermal energy issues ought to be primed because of the environmental impacts it has, economic viability and its contribution to the growth of the energy sector and how it affects the everyday life of the Kenyan citizen.

Langheim, et al., (2014) notes that the nature and angle of reporting will largely influence and shape the public's perception and discourse about geothermal energy and also the extent to which this reporting goes can mirror and inform the readers' priorities within the realms of policy development, (McCombs, 2002). The media is known to promote development through its reporting and by so, the need for this study and significance of this research is that all information, advocacy and campaigns to embrace and implement geothermal energy and other forms of renewable energies would be useless if geothermal energy stories are not well characterised and reported; this in which the media plays a vital role.

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

This study will benefit the media community; as they are at the center of every advocacy to give frequent and balanced coverage of renewables. It will enhance on how the media should report on geothermal energy. The study will also be of use in analysing audience discourse surrounding geothermal energy in Kenya and more importantly, this study will

benefit the Independent Power producers (IPPs) who take up these projects and other energy investors.

### **1.8 Scope and Limitations of the Study**

This study was based on two local publications, *The Nation* newspaper and *The Standard* newspaper for the period between July 2017-June 2018 ; newspapers of Monday through to Sunday. By this, the researcher means that only geothermal energy stories published on this said periods on both articles will be analysed.

This period is imperative because of the contribution of geothermal energy into the national grid, there have been reduced power shortages and rationing in the country, more businesses have turned into a 24hour economy due to the cheap electricity tariffs at night hence relatively low production cost, citizens too have enjoyed cheaper electricity tariffs (Ritcher, 2017). This period is also imperative because of novelty with Olkaria V having been completed and Olkaria VI is under construction.

This study has only focused on geothermal energy which is just one amongst the numerous renewable energies which contribute significantly to the energy mix and energy development in the country and the region at large.

The challenges that were faced by this study were: only articles from two publications were analysed from the numerous publications available in Kenya. Another limitation was that this study only focused on a one year period yet geothermal energy contribution to the energy mix and the developmet of the energy sector is not recent.

## 1.9 Operational Terms

**Editorial additives:** this means pictures, cartoons, statistics and graphics

**Energy mix:** this term refers to the combination of the various primary energy sources used to meet energy needs of a particular region.

**Genre:** to mean either hard or soft news

**Mitigation:** means to curb/stop the process of something.

**Promotion:** to encourage the use of a technology.

**Renewable energy:** these are forms of energy that are replaced rapidly by a natural process.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Overview**

This chapter tackles the literature studied on the mandate of media in their coverage of development stories, media in disseminating information, media in economic development, challenges facing geothermal energy in Kenya and geothermal energy in economic development; conceptual framework on the research objectives and research variables and finally, this chapter will look into the three theories that this study is anchored.

#### **2.1 Challenges Facing Geothermal Energy in Kenya**

Kenya has a vision to attain industrialisation status and become a middle income country by the year 2020 and internationally achieving *the standard* development goal number 7 and by this: sufficient, reliable, cheap and environmentally friendly electricity is an important factor in achieving this government objective. Geothermal energy becomes this important factor that can lead Kenya to attain its goals. But, despite the major milestones that geothermal energy has made in the country and in the region at large, its development still faces a lot of challenges and they include. During coverage of geo-energy, these are some of the dominant issues that ought to be covered by *the Nation* and *the Standard* during Agenda setting. Udomsilp, (2014) states that accurate and factual information empowers the publics' to better make the most of their rights to discuss and think freely concerning a particular issue.

### **2.1.1 Financial**

Ogoye(2002) noted that the initial capital cost is very high hence inhibiting the process of developing geothermal resources in Kenya. Take for instance the total amount of money cost in constructing the new Okaria IV station and drilling of the well to meet up the expected MegaWatts on time. (Heuwel, 2013) echoes that the biggest challenge facing this endeavour is the lack of investors to support these projects. KEnGen alone cannot fund the entire due to budgetary constraints not minding its entire bulk of tariffs whereas the government may or may not chip into these projects fully due to scarcity of funds.

### **2.1.2 Technology**

With new and better technology coming up now and then in well drilling and construction of geothermal plants, flexibility has been introduced and this has led to even higher rates of success. Never the less, obtaining this new and emerging technology is very expensive considering that new technologies emerge every day (Ogoye, 2002).

### **2.1.3 Environmental Concern**

Geothermal energy as a form of clean energy can be said to be environmentally friendly: different writers have argued though that it all depends on the method of extraction and hence the environmental impacts it has on the environment is much smaller as compared to that of fossil fuels, then geothermal energy releases the least amount of carbon dioxide into the air and hence termed safe and clean and environmentally friendly (Geothermania, 2009), (Ogoye, 2002)



Any gas emissions from the geothermal plants can be tapped and balanced by tapping back into the earth surface any fluids brought to the surface of the earth, a process called carbon capture and storage this is according to Envirocitizen, July31 2017.

#### **2.1.4 Skills**

KenGen has a relatively high number of skilled personnel to work in the geothermal plants, but still, the company faces a deficiency in human resource in sectors such as reservoir evaluation preliminary design in steam field development, feasibility study in appraisals.

The government through the ministry of renewable energy has put up strategies to ensure that this gap is filled and ensure adequate human resource in the entire geothermal development company. This has been done by training more persons in the Geothermal Training Institute. This project costs the government US\$ 70,000. (Ogoye, 2002) (Geothermal Development Company, Sep, 2017).

#### **2.1.5 Economic Performance**

Electricity is a very fundamental factor in almost all economic activities and by so, when the economy of a country grows, their also an increase in the consumption of electricity and by so, the need to have a stable energy supply to avoid power outages and rationing. The ministry of renewable energy together with the ministry of energy and petroleum in 2017 commissioned the construction of OlkariaV geothermal power plant that is set to input 158MW into the national grid. This is in order to meet up with the ever growing demand for electricity in the country and to enhance economic development in the country (Ritcher,2017), (Ogoye, 2002).

### **2.1.6 Project Implementation**

Geothermal projects usually have a stipulated time frame under which certain projects should have been completed and commissioned. This is usually never the case as delays in startion of projects and halting of projects are usually the order of the day. Some due to financial reasons, others due to policy implementation, lack of political goodwill and many more an dhence, these usually results in targets not being met (Mwai, 2016).

### **2.1.7 Land**

Any physical project or initiative require land and for any geothermal project land too is required for activities like drilling of the wells, roads, wells establishment, the power plant and many other activities involved in geothermal energy extraction. With the increase of human population, land has become a scarce resource and hence projects like geothermal energy time to time is in competition for this precious commodity with human beings and more often it forces the GDC to relocate and compensate residents for using their land. The process of identifying, relocating and resettling and compensating people usually is time consuming hence stalling and delaying the flagships of these projects (Ngugi, 2014).

## **2.2 Geothermal Energy and Social Development**

Geothermal plants are located near residential homes and more often than not, GDC and KenGen are bestowed with the responsibility of ensuring that the surrounding communities embrace geothermal projects by extending direct benefits to them. This leads to the communities accepting the projects because they see that they are benefiting directly from the project.

**a) Water**

The Olkaria power plant depends on Lake Naivasha for water and with this, most of the boreholes drilled by residents are dry or only release stem hence rendering the communities waterless. This is coupled up with the fact of unreliability of rain and hence low water level is low in the lake. Ken Gen together with GDC through the Environmental Management Program provide pumped water for residents, the KWS staff and wild animals are also a beneficiary of this program.

**b) Road Construction**

The area supports directly and indirectly over 500,000 people. A road of about 40Km stretching through Olkaria to Naivasha has been tarmac. This initiative opened up the area to lots of other activities like agriculture, tourism and hospitality industries have thrived. Easy access to the Hells Gate national Park, horticultural fields equitably has led to employment opportunities for the residents supporting about 500,000 people. Other sectors that have benefited from construction of roads in this area include the flower business and local tourism rate has gone up in the area. This is a positive impact to the community (Mwangi, 2007.)

**c) Employment Opportunity**

The geothermal power plants in the area need personnel to work in the power plant. Many residents have been employed by the GDC and the power station is home to about 425 staff members. The Olkaria power plant provides employment opportunities not only to the residents of Naivasha but to a country as a whole. For example, high caliber jobs like scientist, engineers, geophysician, geochemists and many others are sourced nationwide and even internationally while jobs like construction of access roads, rehabilitation of

damages sites and other semi-skilled. This will head start other activities including trade (Mwangi-Gachau, 2011).

**d) Increased Power Supply and Stabilisation of Electricity**

With geothermal energy supplying more than 50% into the energy mix, Kenya has enjoyed a stable supply of electricity with no power shortages and rationing. More people are connected to the national grid and hence are able to access electricity (Ritcher, 2015).

**e) Cheaper Electricity Tariffs**

The Ministry of energy and petroleum in 2016 announced that electricity tariffs has gown down and hence Kenyans are enjoying cheap, clean and affordable electricity. This also enabled businesses to thrive because a stable electricity supply is a fundamental factor to the smooth running of most businesses. (Ritcher, 2017).

**f) Opportunity for Training and Acquisition of Skills**

The geothermal power projects are distributed among the various sites and hence, activities are too much and they require highly skilled personnel. For the successful and timely completion of these activities, a dynamic and multi professionals are required and by this, through the Geothermal Training Institute in Kenya, the government is able to provide short courses, workshops, seminars, are organised to increase knowledge amongst their employees (Lund, 2007) (Mwangi-Gachau, 2011).

**g) Corporate Social Responsibility (CSR)**

In the report by KenGen in 2010, KenGen has a CSR committee that deliberates on the activities that would be done to maintain a good rapport with the community. Some of the activities include education sponsorships to local students, water supply, promoting

afforestation in the community through the Olkaria tree nursery that donates 200,000 trees annually.

### **2.3 Geothermal Energy and Economic Development in Kenya**

In a bid to transform Kenya to a middle level income country and provide Kenyans with clean and reliable energy, Kenya has embraced geothermal energy and thus has huge impact to the development of the economy of this country. *The Nation* and *the Standard* newspaper has a development role to play during their coverage. This it does to ensure that in their reporting of geo-energy, it showcases how this renewable energy leads to the economic growth the energy sector.

- a) Investor attraction: With reliable and stable electricity, business investors can now come to Kenya and set up their businesses without fear. The ministry of energy and petroleum 5 levels (Yee, 2018).
- b) The nature of coverage greatly influences the Independent Power Producers (IPPs) to take up and finance more on geothermal energy projects.

### **2.4 The *Daily Nation* and *the Standard* Newspaper**

According to a survey done by GeoPoll's media measurement survey 2017, *the Nation* and *The standard* newspapers still take the lead by audience size and share beating their competition by a large margin. *The Nation* has an approximate readership of 4,379,400 per day whilst *The Standard* has 2,223,500 per day; this means that *The Nation* newspaper controls about 40% of the share and 20% for *the Standard* (Elliot R. , 2015). In terms of tradition, *The Nation* newspaper is an old newspaper with the first copy sold in 1960 whilst *The Standard* newspaper was sold its first edition in 1902 (Loughran, 2010), With this, it is

evident that whatever agenda these two newspapers set to prime, it will affect how their readers view a particular primed issue as very important as opposed to one that is not primed.

## **2.5 The Media and its Priming Effects**

Priming theory proposes that when audiences consume a particular media product then other concepts in mind that are of the same meaning are hence activated for a short period after exposure (Berkowitz, 1986; Devine, 1989). The authors go ahead to say that the effects of mass media content to the public in processing information after exposure is short-term. The thoughts created hence activate each other leading to actions related to what the consumer or the audience was subjected to which leads to the spread of activation. (Jo and Berkowitz, 1994). The reasoning process is insentient and/or involuntary and consequently links to these related ideas are processed whether or not the individual consents to them, as long as those ideas are present in the individual's associative system. Individuals affected by the prime will be more likely to apply these activated thoughts to other stories even when the story at hand is not connected to the priming experience (Sherman, Mackie & Driskoll, 1990).

Arnold (2010), Notes that the impact of news priming by the media is significant for decision making by the audiences. She goes on to explain that people always will want to take a shorter route when coming up with a decision about an idea and unconsciously they would rely on the information that is most reachable in their minds. Media coverage of issues has an effect on which ideas are activated for appraisal by selecting and putting emphasis on certain aspects and ignoring some. (Domke, Shah, & Wackman, 1998) argues

that the actual priming effect is as a result of frequency: that is, the more a story is given prominence by the media, the greater its availability in the audiences memory and this will make that issue significant in making a decision over others that might also be relevant.

Development experts can use the priming effect to push for their own development agenda. For example, Geothermal Development of Kenya can decide to do a massive communication campaign illustrating the state of geothermal energy in the country and the future plans and it could just be taken up by the media and definitely it will get noticed by the audiences. Many organisations are creating awareness on the state of renewable energies in Kenya and encouraging journalists development practitioners can use the priming effect to advance their own development goals and to report and cover more on renewable energy (Kabatesi, 2017). A massive communication campaign can put it on the public agenda (agenda setting) but can only be made a salient issue by repeatedly reporting about it (priming). The amount of communication on geothermal energy and renewable energy at large will then influence the importance of clean, reliable and sustainable energy to the stakeholders and the media.

### **2.5.1 The Media and the Information Role**

The media is tasked with conveying information and making it easily available to its publics. This information is dispatched via an extensive communication platform; some of these platforms are paid for while others are free, others are for members only while others are without membership. Print media involved printing of multiple copies of the same issue, date and edition number; with this, their publics get to read the same edition with the same story despite their physical location. The media is generally and readily available to

an indefinite number of persons notwithstanding the repetition of stories and the length of the information is also paramount (Shepherd, John, & Striphas, 2006).

How information is relayed to the public greatly affects the quality and amount of data and a good way of ensuring that the information will reach its intended audience and have the intended impact is to tailor the message with the needs and wants of the audience of that particular message. The orthodox means of relaying information to audience by the use of paper is still significant; though the internet is equally being embraced. Its availability throughout only means that audiences can get information at their convenience but despite its availability, there still exist a section of the audience who still would not know how to use it (Katz, Lazarsfeld, & Roper, 2005).

Kerzner (2006), Media professionals will at many times use the help of analysts or experts to help pass certain information across to its audience. For example, in Kenya during a round table discussion regarding clean energy, experts from the ministry of energy, those dealing with renewables such as solar and geothermal were invited to help shed more light on the topic at hand. This ensures that the media gives fact full information and that the information conveyed is well understood by the readers. Geothermal energy experts are in a better position to pass the correct information regarding geothermal energy especially during the onset of this issue. This strategy of relaying information can lead to an upgrade and boost rapport with readers.

Information can be developed and consumed and works best when good research is done and with an extensive human coordination. Some consumers will get the information from newspaper while others get it from engaging in talk with other people. Conveying of



government information by the media transforms the general population into educated nationals as the whole population is shifting towards post- advancement. It also encourages the general audience to practice their right to know which is essential when they are to make decisions with respect to their interest in the support of this stage. Generally, the media plays a significant part in correspondence through dissemination of information, providing exchange programs, giving ideas, teaching skills for a better way of living and making a base of agreement for stability of the state (Cialdini, 2008). Udomsilp, (2014) states that accurate and factual information empowers the public's to better make the most of their rights to speak freely, helping them settle on rational choices and undertake correct actions valuable to them. With the media performing its duty of educating and informing its audiences, this research is set to find out how print media in Kenya covers stories concerning geothermal energy in Kenya.

### **2.5.2 The Relevance of Frequency in News Media Reporting**

According to (Makienko, 2012) frequency is how many times a media consumer is exposed to a particular story or any other media product. Frequency plays an important role in planting particular ideas intended by the agenda setter to the audiences. This is with the solemn reason that during debates and conversations, the audiences talk about that thing that has been consistently been implanted in their cognitive through covering of a particular issue multiple times and also with the help of other news priming factors such as placement and size of the story.

Khadir (2012), suggests that frequency goes hand in hand with reach. In print media, reach could be termed as the readership and circulation of a particular newspaper and by this; the higher the readership number, the higher the number of people who will be subjected to

that particular message being covered and primed multiple times. Khadir goes on to say that greater frequency promotes interests and/or desire for a particular product/idea on a continuous basis.

Frequency in news coverage delivers attention, recall ability and timeliness. For example, at this particular time in the country energy is one of the key development index of a country and issues of clean energy is surrounding it, multiple coverage will give clean energy the desired attention it deserves, couple it up with priming, then recall ability is achieved and by this, a debate on a particular issue being “hyped” could easily be formed (martinez, 2013).

## **2.6 Theoretical Framework**

This study will be guided by the Agenda Setting, Agenda Priming and Agenda Building theory.

### **2.6.1 The Agenda Setting Theory**

This theory was coined by Maxwell McCombs and Donald Shawn in 1972. Karell (2018), describes this theory as to how the media’s news coverage determines which issues becomes the focus of public attention. Agenda-setting theory depicts the ability of the news media to impact the notability of subjects on audiences’ general motivation. This is to say that if a news item is awarded much of time, frequency and space, then it is obvious that it will get the desired reaction and attention from the public’s and they will view the issue as important. Agenda-setting is the formation of open mindfulness and worry of striking issues by the news media.

Two essential thoughts motivate research on plan setting

- a) The media don't mirror reality instead they shape and channel it;
- b) Media insistence on a particular issue and ideas drives the audience to view those issues as of more significance than others (McCombs & Shaw, 1972).

To contextualise this theory with this study, the researcher agrees with (Cobb & Elder, 1971) that some entities benefit more than the others reason being they are able to push their issues to the agenda unlike others. For example, legislators and other policy makers have more control than other news sources because they understand the language of the journalist and their need for have proper information and even their definition of newsworthiness. Geothermal energy is a critical input into the energy sector and energy mix at large, its contribution to the conservation of environment is evident, its contribution towards elevating the livelihoods of Kenyans is also very clear. By this, it is imperative that citizens get to know about geothermal energy.

### **2.6.2 The Agenda Building Theory**

This theory by Cobb and Elder in 1997 talks of how news organisations' and journalists feature put emphasis and/or selects certain events to report on over other events. It is said to be like the Agenda setting theory but different too in a way. (Lee, 2017) argues that whereas agenda setting theory looks at what the audience talks about, the agenda building theory seems to talk more like the news media itself being used as the tool to shape policy of effect political change. Putting this in context, in as much as there is a lot of campaigns about renewable energy and climate change, more effort is being put on the media because the media happens to be the agent of change and by this, most organisations in their advocacy for more coverage of renewable energy and geothermal energy, almost half of the effort is spent on sensitising and training journalists on how to report on renewable

energy and the environment. Another aspect of the agenda building theory is that the news that gets to the masses is usually a collection of 3 different agendas, the media agenda, public agenda and the newsmakers agenda. So, these three components will determine what news gets to the public domain. Agenda building theory relies mostly on information subsidies.

### **2.6.3 The Agenda Priming Theory**

In this theory, the media tends to put more attention on an issue by giving it prominence and the audience starts to view the story in a particular angle set by the media. It is how the media effect amongst its audiences is enriched by providing a primary opinion; the brain of a human being makes judgments and choices based on the fixed ideas that are already stored in the human brain. Priming enables the consumer to gage the situation and make conclusions on the effectiveness of the media and by this; we can say that the media creates an idea in the people's mind for them to make a conclusion.

The media effects have impact on particular aspects while ignoring the others. The prominence shown in the media for any issue becomes a major factor in creating an impact in a person's judgment. This can cause to less concern on the more important issue. Media effects have control on certain aspects while ignoring some. The eminence attached to any issue by the media ends up becoming a vital factor in molding an idea or impression in a person's mind.

Priming occurs daily when a person is exposed to words or actions frequently, then these actions will become more noticeable to them. Media impacts then increases if it is preceded with a familiar setting. By the media awarding more time on a particular issue

acts as a source of priming and this could cause trouble (Iyengar, 2008). Iyengar continues to say that in print media prominence is given to a story through placement of the news item in the newspaper; what page did the geothermal energy story appear on? Also through frequency, how many times does geothermal energy story get featured in the newspaper?

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Overview**

This chapter explains the methodology that has been used to conduct this research. It tackles the target and sample population, research design, data collection methods, presentation and research instruments.

#### **3.1 Introduction**

A research strategy is very fundamental to a researcher especially in bid to unearth possible findings to a research question (couper & Schindler, 2003). The authors go ahead and explain that, relevant tools and methodologies exist that a research strategy must have. Plus, it is imperative for the research to use tools and methods that will aid in pointing out the reliability and validity of the material and data obtained. In addition, it is important that all materials and the collected data be carefully examined (Robson, 2002).

This study has begun the research strategy for this project by collecting and examining some background information regarding the situation of geo-energy in Kenya. Results from both the primary and secondary data will be examined in order to ascertain the most significant results.

#### **3.2 Research Design**

Study design is the outline, plan or scheme that is used to generate answers to research problem Cooper & Schindler, (2003). This study employed content analysis as its research design. Elo & Kyngas (2008), describe content analysis as a method of analysing communication documents whether written, verbal or even visual communication

messages that are created to be viewed, read, interpreted and acted upon for their meanings and hence must be analysed with such uses in mind . content analysis was introduced more than half a century ago but still proves relevant up till date especially in the field of mass communication (particularly print media) and content analysis has further become an effectual substitute to public opinion study which is a method of tracking markets, political learning and emerging issues (Hansen, 1998)

### **3.2.1 Research Approach**

This study employed a mixed method approach. That is, both the quantitative and qualitative approaches will be employed. The mixed method design for this study was the concurrent nested method. This design involved collecting data in one phase and during which a predominant method, either qualitative or quantitative embeds/ nests the other less priority method, this is according to Wisdom and Creswell, (2013).This method will help me gain a broad and in-depth perspective on how *the Nation* and *The standard* newspaper cover or report on issues of geothermal energy.

### **3.2.2 Research Method**

This study used the case study as its research method. The case study required the researcher to look into the *Nation* and *the Standard* newspapers as from June 2017- July 2018 and explore the coverage of geothermal energy in Kenya

### **3.2.3 Data Collection Procedure**

The researcher located all articles relating to geothermal energy in Kenya published by *the Nation* and *the Standard* newspapers for the mentioned period. Through purposive sampling, the researcher used the key word geothermal energy to get the specific stories

from the online data base of both *the Nation* and *The standard* newspaper. The researcher also went to GDC and KETRACO offices to get the newspaper cuttings on geothermal energy for this study.

#### **3.2.4 Data Collection Site**

Data was collected from *the Nation* and Standard newspaper offices, the University of Nairobi Memorial Library and the GDC offices.

#### **3.2.4 Population and Sampling Procedure**

A study population is defined as a complete collection of elements with similar observable characteristics and they are from a certain unit that is of research interest to the researcher Cooper and Schindler, (2003). According to (Elliot R. , 2015) *The Nation* and *The Standard* publish approximately 150 articles daily and so in a year; each newspaper publishes a total of 54,750 stories. Purposive sampling was employed by the researcher to get stories on geo-energy for the respective period using the key word “geothermal energy.” The power of purposive sampling lies in selecting information rich cases for in-depth analysis related to the central issues being studied (Kombo & Tromp, 2006).

A code sheet was the data collection instrument used to collect quantitative data while thematic analysis was used to collect qualitative data.

### **3.3 Presentation and Analysis**

#### **3.3.1 Data Analysis**

Content analysis can be analysed either through the inductive process (identifies themes and patterns) or deductive (quantifies frequencies of data). This research being a mixed method research, the study employed both the inductive and deductive. For the deductive



process, the researcher will do a designation analysis. This is a type of analysis that determines the frequency with which certain objects/persons/concepts are mentioned. Through a coding sheet, the researcher looked into issues like: how many stories appeared in the front page? Quantitative data was in SPSS or excel. The inductive process was used to analyse qualitative. According to Morgan (1997), this includes creating smaller chunks (themes, categories) of the data and then placing a code with each chunk based on the samples of the collected data then classify major issues or topics covered. Data was analysed through the following parameters

1. How many articles are published on both publications between June 2017-May 2018?

This will be analysed by counting the number of geothermal energy articles that have been published on both publications; and establish how many articles are published daily, weekly and monthly within the mentioned period.

2. Priming: placement (the page number in which the story is placed)

Size of the story (full page/splash story, half a page, a quarter page or an eighth of a page.)

Genre (here, the researcher checked to see if the story was hard news or soft news.

Soft news included editorials, comment/criticisms and advertorials)

Editorial additives (does the story have pictures, cartoons, graphics etc.)

3. Issues addressed: are the geothermal energy stories published political, social or economic centered news? This study sought to know the purpose these issues address; for example, do they inform, set an agenda, do they build an agenda or are the stories flat (no new information is offered). The researcher analysed the stories by reading and decoding what pertinent issues came out.

### **3.3.2 Data Presentation**

Quantitative data was presented via a table while qualitative data was presented with the narrative style.

### **3.4 Validity and Reliability**

The validity of an instrument is the ability of an instrument to give you the desired results. In quantitative data, the researcher uses a study code sheet which was subjected to 5 contents to be analysed and test to see if the researcher will get the desired outcome, if not then the code-sheet was to be improved to enhance its validity. Nunnally (1978) suggests that reliability is the ability of an instrument to give the same results over time. By this, it means that if another researcher uses the same research instrument then he/she is able to get the same result as the previous researcher. The author goes on to say that as a rule of thumb, a reliability coefficient value of above 0.7 is statistically reliable and acceptable for a study.

### **3.5 Research Ethics**

Ethics is of great significance as it provides assurances to the participants of any research and their representatives' organisations, seeing to it that their rights and welfare is protected and wholesomely protecting the standards of research governance (Resnik, 2011). This study adopted a code of ethics to promote the highest standard of ethical awareness and behavior throughout the period of this study. The researcher obtained a certificate of fieldwork (see appendix) that was presented to the relevant offices for data collection. She also sought permission from the librarians to be able to access newspapers at the library. The researcher also drafted letters to GDC and KETRACO requesting to use their media monitoring facilities to access data. The final project was also submitted to an

originality test to ascertain that the work is the researchers'(see appendix); thereafter a certificate of correction was dully signed by the relevant persons (see appendix) to ascertain that the project had undergone the necessary procedural checks and it complied with the requirements of The University of Nairobi, School of Journalism.

## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1 Overview

This chapter looks into the findings of how geothermal energy in Kenya was covered by the two leading local dailies; between July 2017 and June 2018. Findings are presented in different parts including frequency and priming (in terms of placement, size of the story, , editorial additives and genres.) Thematic analysis was done on the study to get the dominant themes that came up during coverage of geothermal energy. Approximately 150 articles were analysed from each publication on a daily basis.

#### 4.2 Frequency of Coverage of Geothermal Energy

Here, the researcher dealt with how many times geothermal energy stories appeared on the two publications for the said period. The researcher agrees with Makienko, (2012) that the more a subject is covered by the media, the more important it tends to appear and according to agenda priming theory, frequency is one of the ways through which the media primes an idea into the audience's cognitive. This study revealed that geothermal energy in Kenya received low coverage during the study period.

**Table 4.1: Frequency of Story**

<b>Publication</b>	<b>Frequency</b>	<b>No. of Stories</b>	<b>Percent</b>
<i>Nation</i>	20	54,750	0.037
<i>Standard</i>	11	54,750	0.020
<b>Total</b>	<b>31</b>		<b>0.057</b>

In relation to objective one of this study, the findings indicate that 31 stories were covered by the two publications with *Nation* having a higher frequency of 20 stories (0.037%) compared to *Standard* which had 11 stories (0.020%). This means that there was a considerable difference in frequency of stories by the two publications. With GeoPoll 2017, stating that both *the Nation* and *the Standard* newspaper covers an approximate of 150 stories daily which translates into a total of 54,750 stories annually per publication and with 31(0.057%) stories being geothermal related then this study agrees with (Kabatesi, 2017) that geothermal energy is and has received low coverage from the two leading local dailies.

One of the driving thoughts on agenda setting and priming theory says that with the insistence on a particular issue by the media; the audience tend to view that particular issue as more significant compared to the less emphasised stories (McCombs & Shaw, 1972). By the results of this study and the thought on agenda setting theory it is evident that geothermal energy is not considered a very important topic due to the minimal coverage it receives from the two studied dailies. Agenda setting gives audiences what to talk about through repeated coverage and when it appears frequently the people will start to debate about it through commentaries, social media platforms and other feedback channels and when the topic captures the attention of the masses, then more is done to improve on the sector and hence growth. (Cialdini, 2008) states that conveying government information by the media transforms a population to citizens and practice their right to know which is very important in decision making. Now, the statement by Caldini cannot be supported by the findings of this study.

### 4.3 Priming of Geothermal Energy

To analyse priming of geothermal energy, the study focused on: placement, focus, editorial additives, treatment as the parameters of analysis for both publications.

#### 4.3.1 Placement

The placement of a particular story in the newspaper or magazine will determine if the story is given prominence or not Iyengar, (2008). The study analysed placement of stories in terms of level of importance accorded to a story. The researcher categorised the stories into three: front page stories, interior page stories and back page stories. GeoPoll 2017 revealed that stories published on the front page and back pages of a newspaper are said to be of more importance and highly primed as compared to those in the interior pages. Front page was from page 1-5, interior 6-20 and the rest of the pages were considered back pages.

**Table 4.2: Placement of Stories**

	<i>Nation</i>	<i>Standard</i>	<b>Cumulative Total &amp;percentage</b>	
	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>%</b>
Front page	4	1	5	16
Interior pages	16	10	26	84
Back page	0	0	0	
<b>Total</b>	<b>20</b>	<b>11</b>	<b>31</b>	<b>100</b>

*The Nation* newspaper had four stories published in the front page while 16 of its geothermal stories were published in the interior pages and none on the back page. *The Standard* newspaper had 1 story covered in its front pages and 10 in its interior pages and

none on the back pages. This means that five (16%) geothermal stories were primed during the study period.

(Domke, Shah, & Wackman, 1998) reveals that when priming an agenda, proper placement is crucial for priming to be considered effective and for the information to impact positively on the readers. The theory says that a reader will view a primed story as important and would love to follow through. From these figures, the data impacts negatively on readers accessing information about geothermal energy since most of the stories appear in the middle pages and may not come to the attention of the reader.

#### 4.3.2 Size of the Story

The size of a story will determine the kind of salience/priming given to an issue. The bigger the space/size of a story the more important it is deemed to be Iyengar, (2008). The researcher divided a page of a newspaper into four quadrants; a story that filled all the four quadrants, three quads and stories that had a splash were considered to be full page stories, those that took up to two quads were half page, a quad was quarter page and anything less than a quad was considered to be an eighth of a page.

**Table 4.3: Size of the Story**

	<i>Nation</i>	<i>Standard</i>	<b>Cumulative Total &amp;percentage</b>	
	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>%</b>
Full page or more	4	1	5	16
Half a page	6	1	7	23
Quarter page	7	6	13	42
An eighth of a page	3	3	6	19
<b>Total</b>	<b>20</b>	<b>11</b>	<b>31</b>	<b>100</b>

*The Nation* newspaper registered four stories as full page stories, six were half page, seven were quarter page and three were an eighth of a page. *The standard* newspaper had 1 story

as full page, one as half a page, six as quarter page and three stories occupied an eighth of a page. Cumulatively, five stories from both publications were full pages stories, seven occupied half pages, 13 stories filled a quarter a page while six stories covered an eighth of a page. In conclusion, 12 (39%) stories were primed.

These figures indicate that both publications gave very little importance to stories on geothermal energy with a huge number indicating that the stories were quarter paged stories.

From the findings, it is clear that geothermal energy comes up as a mere mention. It is very difficult to get as much information as one would want from a quarter or an eighth of a page story and readers will just deem it as a news briefs and consider geo a less important topic that may not require discussions (Cialdini, 2008). This might be due to the fact that geothermal energy is competing for space with other stories and so it has to be edited to fit within the available space (Domke, Shah, & Wackman, 1998). By this, a lot of information which would be very useful to the audiences is lost. This also affects the news reporter negatively as they end up feeling demotivated and their efforts being wasted by their stories being mutilated and even reducing them to mere briefs. It could also be due to the fact that geothermal energy is not an everyday issue like corruption and governance and so, it is and will only be reported when something new comes up or there is a new development on the existing stories.

### **4.3.3 Genres**

A newspaper treats its stories differently, either as hard or soft news. Hard stories is all about news of the day, it is timely and are meant to be a source of information to the



public's and are independent of the media house; while soft news include opinions, features and advertorials. Under soft news, the researcher decided to look under the following parameters: commentary/criticisms, editorials, features and advertorials. Commentary/criticism is a story published mostly by the publics/columnists. They act as a response/ feedback to a certain matter previously reported. An editorial on the other hand is a comment made on behalf of a media house pertaining a particular issue and represents the stand of that particular media house. It is usually written by the editor of the media entity. In this particular study, general news was taken to mean hard news while editorials and criticisms were meant to be soft news.

**Table 4.4: Genres**

	<i>Nation</i>		<i>Standard</i>		Cumulative Total &percentage	
	No.	No.	No.	No.	No.	%
Commentary/ opinion	2		1		3	10
hard news	18		10		28	90
Editorials	0		0		0	
Advertorials	0		0		0	
Features	0		0		0	
Q&A	0		0		0	
<b>Total</b>	<b>20</b>	<b>64</b>	<b>11</b>	<b>36</b>	<b>31</b>	<b>100</b>

*The Nation* newspaper had two opinionated stories and 18 hard news stories while *the Standard* newspaper had 1 opinionated story and 10 stories were hard news. Both publications had no editorials, advertorials, feature stories or Q&A stories. In conclusion 90% of geothermal stories were hard news stories.

Kerzner (2006) states that media professionals most of the time will use the help of experts or analysts to breakdown an information on behalf of the audience. This ensures that the information reaching the audience is well understood and is as intended. In a newspaper, this is done in the commentary/opinion section; and with both publications recording low percentages on the commentary section could mean that the media houses are only interested in dishing out information. This could also explain why most of the stories appear in the middle pages and are an eighth of a page. Geothermal energy is a technical topic and readers need the information to be broken down for them, for the coffee farmers in Murang'a area to understand why they should drill up geothermal energy and use it in their coffee industries and even sell the energy surplus to Kenya Power for more profit.

In accordance to agenda building theory, the media houses has failed to build an agenda surrounding geothermal energy. The media can make geothermal energy its agenda and write editorials, allow experts to write comments about geo and seeking simplifications and clarifications from geothermal energy experts. This, according to the researcher would boost up the content to be published in both publications.

As much as the media should not attach itself to the news they report, readers want to know what stand the media houses take concerning a particular issue (Kerzner, 2006). This is where editorials come in. An editorial is usually written by the senior most editor of the publication and could act as the stand or position of the newspaper on a particular issue; and is considered prime. When a newspaper sets an agenda for an issue then tops it up with having an editorial about that issue then it convinces readers further on the importance of that topic and even fuels the debate even more and maybe result in a faster uptake of geothermal energy and green energy at large (Kerzner,2006).

#### 4.3.4 Editorial Additives

An additive is an addition of substance or thing to another substance in small quantity in order to improve and produce a particular desired effect. In newspaper stories, an article is improved in taste by the reporter adding cartoons, blurbs/illustrations or even pictures. This is in the aim of breaking down the information to the audience; especially statistics information, pictures are used to give more weight to the story by showing graphically how exactly the situation is whilst cartoons are for humor but they still pass a certain information across. Editorial additives are attractive to the eye and would prompt a reader to read that particular story compared to stories that have no editorial additives. (Shepherd, John, & striphas, 2006). In this study, the researcher looked into the following editorial additives: pictures, blurbs/illustrations, enhanced type sizes, unique type face and cartoons.

**Table 4.5: Editorial additives**

	<i>Nation</i>	<i>Standard</i>	<b>Cumulative Total &amp;percentage</b>	
	<b>No.</b>	<b>No.</b>	<b>No.</b>	<b>%</b>
Blurbs/illustrations	8	1	9	29
Pictures	5	8	13	42
Cartoons	0	0	0	
Unique type face	0	0	0	
Bold texts	0	0	0	
enhanced type size	0	0	0	
None	7	2	9	29
<b>Total</b>	<b>20</b>	<b>11</b>	<b>31</b>	<b>100</b>

These findings indicate that nine out of the 31 geothermal stories were accompanied by illustration; with *Nation* having eight stories while *the Standard* had one story. 13 stories were accompanied with a geo related picture; *Nation* had five and *the Standard* newspaper had eight. Both publications had no cartoons, enhanced type size, bold text and unique type

face in their stories. Nine geothermal stories had no editorial additives accompanying them. In conclusion, 71% of geothermal stories were accompanied by editorial additives.

### **4.3 Dominant Themes**

In order to tackle research question three of this study, the researcher did a thematic analysis on geothermal energy stories to get the themes that stood out during the coverage geothermal energy in this particular period. The researcher found out that the emerging themes are concurrent with the themes that came up in the reviewed literature

#### **4.3.1 Expansion of Geothermal Energy Sites**

In all geothermal stories analysed, the issue of expanding geothermal energy sites was of key concern with the government having keen interest in expanding geo energy sites to enable it inject more into the national grid in a bid to keep up with the escalating demand of energy daily in the country. This is evident as more efforts is being put into the construction of Olkaria VI and talks of Olkaria V11 are underway in which Olkaria VI will put about 2,500MW into the national grid. Olkaria VI will include the installation of a modular power plant which is also deemed to be environment friendly .This is upon the completion of Olkaria V later this year and which was started last year and injects about 750MW into the national grid. The government is hopeful that with these expansions, Kenya will be freed from reliance on expensive thermal run-diesel generators to produce electricity. Geothermal Development Corporation (GDC) has started talks on future projects like the Olkaria VII, VIII and IX.

There are also talks on expanding the national grid to cover the East Africa community with geothermal power plant acting as a distribution point. The expansion will improve

quality and quantity and reliability as geothermal energy will be used. The interconnectivity of these power lines and expansions are a good solution to reliable power supply in the region in the future. More expansion project includes the 140MW geo project in Homabay County. The project once completed will ensure grid sustainability in western Kenya and also ensure that more people are connected into the national grid. Homabay is the only viable geothermal site in Western Kenya. These funds are to be used to conduct a surface study in infrastructure upgrade program in Homa hill. Menengai geothermal plant is under construction.

(Mwai, 2016) and (Ogoye, 2002) both agree that in order to meet up with the ever growing electricity demand in the country and in the region; the ministry of renewable energy together with the ministry of energy and petroleum has to commission construction of more geothermal sites and feed into the national grid. They also agree that geothermal energy is the only viable solution to the growing demand as per now as the country await injection of wind power into the national grid.

#### **4.3.2 Cost**

Geothermal energy drilling, tapping and connection and from the articles analysed, information included how much the government is going to spend or has spent already in the construction of a particular geo sites. KenGen Managing Director Rebecca Miano wrote on May 2018 in *the Nation* newspaper that it will cost the government 40 billion to construct the Olkaria VI power plant. She also said that it will cost KETRACO 10 billion shillings to construct the Narok-Suswa grid lines to enable future mergers of geothermal energy lines and the yet to be connected wind power.

Cost was also highlighted to mean how much the consumer is going to pay for electricity tariffs upon more injection of geothermal energy into the national grid. The cost of 1 KW of geothermal energy going for Sh.7 as compared to the Sh.13 charged for diesel generated fuels. ERC Director General Pavel Oiemeke on the 26<sup>th</sup> August in *the Standard* newspaper said that more use of geo-energy will curb the harsh effects of thermal use on electricity bills. He also mentioned that all these efforts of making sure that more of geo-energy being pumped into the national grid is to make sure that the country has reliable, sustainable and clean energy and the consumer gets cheaper electricity. He went ahead to explain that despite a huge injection of geo-energy into the national grid, Kenya power is forced to review electricity tariffs upwards due to the country still having reliance on hydro and thermal use to produce electricity. According to (Heuwel, 2013) this sector requires huge financial muscles and hence donors who will provide funds are mostly needed. This is concurrent with findings of this study as the country seeks new investors every day.

### **4.3.3 Partnerships**

Geothermal energy and other renewable energy projects are big and expensive projects. And hence the government usually seeks for partnerships/donors and even IPPs who would manufacture energy and sell surplus to Kenya power. The Japanese International Co-operation Agency will fund the Olkaria VI power project, world Bank funded Olkaria V project. Mrs. Rebecca Miano said that they are in talks with a Chinese organisation to fund in the construction of a geothermal power plant as KenGen seeks to increase the contribution of renewable energy into the energy mix. Director General Pavel on the August 26<sup>th</sup> in *the Standard* newspaper called on to the independent power producers and other partners to take up on financing and development of geothermal energy sites. These

IPPs are to develop separate geothermal power plants and in the ongoing Olkaria VI power project, funders are expected to cash in 30 billion for the project.

The African Development Bank will fund the Menengai geo plant. The plants upon completion will feed 48000 households. The AUC will also donate 72 million shillings for a 140MW geothermal project in Homabay.

The agenda building theory involves the use of the media to push ideas and so, this sector has had lots of partnerships including the World Environmental Program (UNEP), and others who push the agenda of climate change and clean energy and constantly use the media to create awareness and inform the public and (Heuwel, 2013) states that with proper partnership on board then the sector could thrive. This is in line with the findings of this study as most of the geothermal sites in Kenya have been constructed with the aid of goodwill from donors.

#### **4.3.4 Disputes and Compensations**

Geothermal energy exploitation takes place in human environment and this sometimes leads to wrangles between GDC and the people living around that area. On 26<sup>th</sup> March 2018 residents of Nakuru went to the streets to push the GDC Company and KenGen to pay their dues. Governor of Nakuru County is quoted saying that residents of people living around geothermal sites should duly benefit from their assets as counties in which geothermal exploration takes place should be given a share of the revenue generated by geothermal companies.

(Mwangi-Gachau, 2011) States that a good rapport amongst stake holders involved is advantageous in many ways like, the residents embracing the project in their community

and thus learning how to live and protect these projects and who know, even benefiting from them in terms of compensation. This is also evident in the findings of this study as geothermal companies have taken up the initiative to negotiate for settlement for people living on the proposed Olkaria VI site. On 20<sup>th</sup> March 2018, *Nation* reports that members of the public are seeking sensitisation on how to co-exist with geothermal projects. Another dispute erupted between GDC and KenGen over steam outlook. KenGen's Naivasha Olkaria and GDC's Nakuru Menengai which one is the largest with both steam producing about the same MW of steam.

#### **4.3.5 Land**

The issue of land is one of the biggest challenges faced by geothermal companies. The government constantly keeps on looking for viable land that could be used as geothermal exploration sites. Upon getting this land, the companies have to put up with resettling and compensating the occupants of that land. This consumes a lot of money and it's very expensive. (Ngugi, 2014) Concur with findings of this study as he states that this type of project requires massive viable land under which construction will take place and requires the government to identify, relocate/resettle and even compensate people who used to dwell in the identified land.

#### **4.3.6 Climate Change Mitigation**

Geothermal energy plus other green energy sources are some of the measures voted in at COP21 as means to curb climate change. The geothermal stories talked of climate change mitigation and the use of renewables to reduce the amount of toxic gases emitted into the air with the use of dangerous fossil fuels to produce energy hence protecting our environment and curbing the rapid climate change. KenGen was hailed for its production



and continued effort in generating environmentally friendly energy in which in the end will give Kenyans access to cheaper power.

#### **4.3.7 Social and Economic Impacts**

With the advent and continued injection of geothermal energy into the national grid has seen to the growth of the energy sector. With business working under the 24 hour economy and more IPPs taking up funding and generating geothermal energy for their business; the economy of the country has seen growth owing that energy sustainability is one of the Key indexes of a developed country (Saino, 2016). Kenya has become one of the super houses in production of geothermal energy that other countries like Djibouti come to benchmark to gain experience in geothermal production. With the country exploring many other renewable to add to the energy mix to ensure that Kenyans are relieved from the heavy cost of energy and high power bills. Mr. Pavel says that Kenya needs more clean energy to achieve the economic golden age and with geo steam being in surplus; it offers an opportunity to bulk power consumers to produce their own electricity. With more and more sites being identified for geothermal exploration, the energy mix in the country will grow from the current 80% inclusive of hydro. The construction of power lines by KETRACO at the coast to transport geo energy will result to the area accessing cheap and clean energy and it is expected to aid in the reduction of fuel cost charge in electricity bills in the region.

Kenya is enjoying a boost in being a super house in geo energy production, however; the country's win in geo energy is duly eroded by high energy needs which therefore undermine the spirit of investment in renewable energy. With Kenya Power introducing low electricity tariffs' at night, more businesses have thrived enjoying the 24hour working

plan due to low cost of production hence economic growth. Kenya used its stature as a renewable energy power to clinch the new global engagements during the expo and also used the chance to popularise herself as a tourism and investment destination. This has really bore fruits as more and more countries are seeking geo expertise from Kenya. For example Uganda and Tanzania have formed a partnership with Kenya to seek expertise on geothermal exploitation.

As a way of giving back to the society, geothermal firms around Nakuru and Naivasha have sort out measures to ensure that the residents are not feeling “used” by the companies. By this; the geothermal companies have done numerous corporate social responsibilities like, drilling water boreholes for the communities, schools around the area are connected to electricity, their roads are tarmac, and recently on the 26<sup>th</sup> of August the geo firms offered to train 400 youths in tertiary institutions. This is affirmed by (Mwangi-Gachau, 2011) who state that the Olkaria power plant has provided employment opportunities both formal and informal and could even foster trade.

#### **4.3.8 Time**

Every other project undertaken is usually done during a specific period (Mwai, 2016) and this study found this to be true as geothermal projects were found to be time bound and at most times, they thrive to meet the time deadline and at other times they do fail. The Olkaria VI power plant is expected to be complete and ready for injection into the national grid by end of 2019 whilst Olkaria V is complete and awaits building of power lines by KETRACO to be able to feed 158MW into the grid system and this injection according to Mr. Charles Keter on the 11<sup>th</sup> February 2018, will reduce the utility cost by up-to 50%. Time is usually stalled with many other external factor like; delays in construction of grid

lines by parties involved, delays in identifying land for geothermal power plant construction, funds and many others (Mwangi, 2007.)

#### **4.3.9 Energy Demand**

The increase of demand for reliable, sustainable, cheap and clean electricity in the country has led to the constant and rampant scouting for viable land that could be used to source more geo energy to fill up the demand (Bayer, 2015). The government according to Mr. Keter on the 21<sup>st</sup> February assured Kenyans that KenGen plans to add 1,745MW into the national grid in the next seven years as it tries to ramp up its electricity production to meet up with the growing demand for electricity and also in a bid to further reduce power blackout.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

#### 5.1 Overview

This chapter is a synthesis of what has hitherto been discussed in the study. It presents a comprehensive summary of the study, major findings and conclusions on press coverage of geothermal energy in Kenya between July 2017-June 2018. It also features pertinent recommendations as well as areas for further research regarding the coverage of geothermal-energy by the two publications in Kenya.

#### 5.2 Summary of the Study

The push for green energy in order to curb climate change has attracted a lot of advocacy from different entities with countries pledging to eliminate the use of fossil fuels; and embrace renewable energy for their ever growing energy needs. Geothermal energy in Kenya has impacted the country greatly both socially and economically, leading to the growth of the energy sector and the overall economy of the country. Authors like (Kinyanjui, 2013) and (Mwai, 2016) have echoed this sentiments by adding that industries that have utilised geo-energy have found it easier to conduct their businesses in terms of lower cost of production. (Kabatesi, 2017) Argues that in spite of the tremendous growth achieved by geothermal energy in Kenya, its coverage is still subtle and lacks prominence. It is with this foundation that the researcher sought to find out how true this argument by Kabatesi is by looking at the coverage of geothermal energy by *Nation* and Standard newspaper in the period of July 2017-June 2018.

Hamel (2010) noted that print media has a more visible part to play when it comes to the promotion of societal change; all in the nature of their coverage of issues. Geothermal

energy is a technology that has impacted the energy and climate sector wholly and the nature of its coverage by the print media could spearhead this development by pushing for more partnerships and more IPPs in the industry. Through Agenda setting and agenda building by the stakeholders, geothermal could get the prominence it deserves and focus on feeding the ever growing energy need in the country.

This study sought to answer the following research questions

1 How frequent did *the Nation* and *the Standard* report on geothermal energy in Kenya in the period July 2017- June 2018?

2 What nature of priming was given to geothermal energy stories by *the Nation* and *the Standard* in the period July 2017- June 2018?

3 What are the specific issues regarding geothermal energy got reported by *the Nation* and *the Standard* in the period July 2017- June 2018?

According to theorists like (Wuff, 2014) and (Kabatesi, 2017) whenever renewable energy is reported, it is usually in a negative manner and merely as a brief and the stories are not given prominence since the journalists writing these stories interview anyone willing to give information about renewable energy. It is with this light that this study adopted the content analysis design and included the mixed method approach. This is the first content analysis study done on geothermal energy in Kenya.

The study populations featured were stories published in the period July 2017-June 2018 with all articles on geothermal energy forming the sample size. Purposive sampling was employed to get the respective stories from the two publications. Thematic analysis was

done on the geothermal energy stories to get the qualitative data that stood out during the coverage in line with research question 3; whilst Quantitative data was collected using a code sheet tool. Quantitative data was stored in SPSS and presented through tables whilst qualitative data was transcribed and analysed thematically.

### **5.3 Summary of Major Findings**

The analysed data revealed the following:

#### **5.3.1 Frequency of coverage**

The study found out that geothermal energy received low coverage from both publications with a frequency of 0.057%. This is very minimal considering the fact that energy enjoys massive media coverage in the two publications (Lund, 2007).

This result means that geothermal energy reporting is not yet considered an important topic that the editors find fit for publication. It also means that geothermal was only reported when the government launched a geothermal project and being that it is competing with other moving stories like corruption and governance then maybe geothermal stories don't see the light of day. It could also mean that GDC is not making enough stories to be published. This result confirms statements by (Kabatesi, 2017) that geothermal and other renewables only get reported by chance.

#### **5.3.2 Priming of geothermal stories**

This study found out that geo energy stories was not highly primed by both publications with only five of the geo stories being primed in terms of placement, five of the stories were full pages/splash stories, 28 of the geothermal stories were treated as hard news stories and 22 geothermal stories had an editorial additive accompanying them.

From the results, it is evident that geo coverage confirms the words of (wuff, 2014) that geo and other renewables get reported by chance and as a mere brief. The poor priming of geothermal energy could be as a result of geothermal stories being spiked and or as a result of the competition by other stories, then geo stories are edited to fit in the small space available and this hinders geothermal from being highlighted more.

### **5.3.3 Dominant themes**

The study established that the most dominant themes during reporting of geo energy are: cost, partnerships, expansion of geothermal sites, economic and social development, time, land, climate change mitigation and energy demand. Energy being a key index of development in the country and the uptake of clean, reliable and sustainable clean energy being one of the sustainable development goals; geothermal energy has proven to be the only clean energy that has been able to feed the national grid with a substantial amount of MW that has seen citizens of Kenya enjoy the benefits of its injection.

Geo drilling and tapping is a very expensive affair and hence prompts the government to look for donors and viable land and even define time that will be taken for the exercise and that is why the themes come out strongly. Geothermal projects hit into the tax payers money and so, the issue of cost of electricity is highly reported so that the readers can understand how they are set to benefit in terms of cheaper tariffs and its effects into the economy at large. Looking for land involves displacing people from their land and compensating them; it also involves training people on how to co-exist with geothermal energy projects. All this is in a bid to curb the daily growing demand of energy in the country and region at large.

From the analysis the researcher disagrees with ( Karekazi & Kithuyani, 2003) that geothermal and other renewables receive negative reporting with every article showcasing the benefits of geothermal energy.

#### **5.4 Conclusions**

The study sought to establish the print media coverage of geothermal energy in Kenya. Based on the findings of this study, the following conclusions were drawn:

The study disagrees with authors like (wuff, 2014) and (Kabatesi, 2017) who said that, whenever renewable energy was covered, it was filled with negativity. This is not true as all geothermal energy stories analysed were hopeful stories filled with lots of positivity and very informative. In that, whenever there was coverage of geo-energy there was always a new piece of information to be relayed. It is also not true that whenever journalists are covering such stories they tend to get information from anyone who is willing to give; from the findings we see that 71% of the stories were gotten from government officials in charge of geothermal energy and energy at large with 12% emanating from the various stakeholders willing to finance these projects. When it comes to coverage then (Kabatesi, 2017) is right when she says that coverage of geothermal energy and other renewable is subtle and lacks prominence.

The study concludes that most geothermal energy stories are general news and little on comments/criticisms or even editorials. This might mean that even the media entities do not understand geo and related stories and hence find it difficult to do editorials and these trickles down to readers who now are unable to comment. Geothermal projects are filled



with technical terms and statistics that if not well analysed and broken down for the reader then the audience might get lost and even create a perception about energy related stories.

Majority of the geothermal stories were in the inside pages and which are not considered to be prime pages and also the space allocations for the stories comprised of a quarter page and below and hence it is concluded that geothermal energy is not given the prominence it deserves by the print media

The researcher hence concludes that there is need for journalist to engage more in environment reporting to coincide with how rampant institutions fighting for climate change and championing for renewable energy are advocating and training media persons on how to write and report on such issues. The trainings by these institutions should involve media training schools; this to mean that environment reporting should be included in the curriculum so that by the time media students get into the field, they are knowledgeable and can write analyse and even critique an environment piece.

Firstly, the study established that geothermal energy received frequency of 0.057% during the study period and the results contradicts with the agenda setting and agenda priming theory that notes that audiences will talk and act on that idea that has been implanted in their minds through covering of a particular issue severally (Makienko, 2012).

In this regard unless geothermal is not covered frequently, then the idea to have more IPPS take up geothermal energy would not be fulfilled. With more coverage, it would indicate that geo is an important technology that needs to be taken up. Coverage could include reporting on how IPPs have benefited from the uptake and the strategies used by them instead of just reporting on what the government does.

Secondly, poor priming of geothermal stories could lead to audience missing out on important information. The findings indicated that geothermal was just fitted into the available space and hence locking out so much information that would have been beneficial to the audience. The researcher concludes that more space be availed for geothermal stories and they be reported in the prime pages of the newspapers and editors should do follow up reporting by writing editorials, having more feature stories on geothermal energy and adding editorial additives to the stories would make them more appealing to the reader.

Lastly, the dominant themes that came up during the study are a true reflection the issues surrounding geothermal energy as written by (Ngugi, 2014) and (Ogoye, 2002).

## **5.5 Recommendations**

Based on the above results, this study recommends the following:

- i. The press should write more geothermal energy stories and place them in prime pages. More of editorial and critiques would work better. This will show that media personnel understand what they report and have interest in it. This will also show that they do follow up on the projects and raise questions if something is not right and in this the media would be exercising their adversarial role. This will be in line with the roles of the press in any democracy nation (Scheufele & Tewksbury, 2007) GDC should continuously update and feed the newsrooms with any new information concerning geothermal projects. Journalist should report and write more on geothermal energy and editors to give more preference to geo just like they do with other issues like governance and corruption to enable set an agenda on the benefits of geothermal energy and other clean energies.

- ii. Geothermal stories should be adequately primed by creating more space for geo related stories, covering them in the prime pages and adding editorial additives to the stories. The researcher recommends that infographics would work better in telling geo stories. Infographics are appealing to the eye and is not cumbersome to read. Findings across these areas show the way in which the media shape public debate in terms of setting agendas and focusing public interest on particular subjects (Harper & Philo, 2013).
- iii. Special attention to be given to the benefits of geothermal energy and by so, editors should do more editorials and get experts to shed more light on geothermal energy. This would create knowledge to the readers and attract more IPPs. The educative and advocacy role of the media requires that the media gives audiences more information on how the geoprojects will affect their lives directly and also provide a market place of ideas. For example show case the highlights and success stories of other IPPs to encourage other to follow suit (Mueller, 2012).
- iv. There is need for study on the coverage and utilisation of renewable energy at large. This is because this study only focused on geothermal energy leaving out four more types of clean energy. This would give a more comprehensive finding on the state of renewable energy in the country and also give a definite position of the media and nature of coverage of renewable energies. The media has a responsibility of informing its public about the happenings in the world especially in those capacities in which they do not have access or direct knowledge and experience and this areas include geothermal energy and energy at large (Harper & Philo, 2013).

- v. Geothermal energy as a form of clean energy can be said to be environment friendly but the extraction and drilling of geo-energy has risen as series of environmental concerns. This study recommends for a study to be done on how safe the gas emissions from geothermal plants are.

### **5.6 Suggestions for Further Studies**

The study's objective was to look into the print media coverage of geothermal energy by *The Nation* and Standard newspapers. It focused on the frequency of coverage of geothermal energy, priming and the dominant issues that come out during coverage of geothermal energy by the two publications for the period of July 2017 to June 2018. This study suggests a similar study deriving samples from all local dailies with a longer study period. This would help confirm the consistency of these findings.

The researcher suggests a study on the coverage of Renewable energy by broadcast Stations. This would help confirm coverage of all other green energy that make up the energy mix in the country

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## APPENDICES

### Appendix I: Code sheet

Detail/Item	Analysis Key	Code
Story Source	<i>Daily Nation</i> 1 <i>The Standard</i> 2	1 2
Date	July August September October November December January February March April May June	1 2 3 4 5 6 7 8 9 10 11 12
Number of geothermal energy related stories in the newspaper		1 2 3 4 5
Day of the Week Indicate the day of the week when the story was published	Monday 1 Tuesday 2 Wednesday 3 Thursday 4 Friday 5 Saturday 6 Sunday 7	1 2 3 4 5 6 7
Indicates the level of importance accorded to the story in a newspaper.  High Focus F1 Medium Focus F2 Low Focus F3	High Focus=1 Front Page =FS Back Page= BS Headline Keyword= HS Graphic devoted to geothermal energy Issue= G1 Editorial Story=ES <hr/> Medium Focus=2 Graphic integrates geothermal energy with another issue= G2 Graphic include geothermal	1 2 3

	energy-related issue=G3 Section of integrated specific story devotes 10-20 lines= L1 Section of integrated related story devotes 20+ lines= L2	
	Low Focus= 3 Section of integrated specific story devotes 5-10lines= L3 Section of integrated related story devotes 10-20 lines= L2	
Indicate what is the dominant topic within the story:	cost SG 1 Electricity tariffs ET 2 Climate change CC 3 Environment ER 4 Energy development ED 5 Project Implementation PI 6	
Treatment Indicate the way that the story is written, not to be confused with the subject of the story	General News= GT 1 Reflective= GR 2 Commentary/Criticism= GC 3	
Indicate if any sources were used in writing the story (1) government officials (2) partners involved (3) Business Operators	None 0 Government Officials=GO 1 Ordinary People =QO 2 Partners involved =QA 3 Business Operators=QH 4	
Graphics Define the type of graphic used	None 0 Picture- G1 1 Graph- G2 2 Illustration= G3 3 Cartoon=G4 4 Side bar list= G5 5 Pie Chart= G6 6	
Picture Define the picture sensationalistic, symbolic	None 0 Sensationalist picture= 1 P1 Symbolic picture=P2 2	

**Appendix II: Certificate of Fieldwork**



**UNIVERSITY OF NAIROBI  
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**REF: CERTIFICATE OF FIELDWORK**

This is to certify that all corrections proposed at the Board of Examiners meeting held on 24/06/2016 in respect of M.A/PhD. Project/Thesis Proposal defence have been effected to my/our satisfaction and the project can be allowed to proceed for fieldwork.

Reg. No: KEO/86962/2016

Name: ELSIE AURELIA OCHIENG

Title: PRINT MEDIA COVERAGE OF GEOTHERMAL ENERGY IN KENYA.

A CASE OF THE NATION AND STANDARD NEWSPAPERS.

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SUPERVISOR

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30/08/2018  
DATE

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ASSOCIATE DIRECTOR

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09/11/2018  
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Dr Nalch Ndlovu  
DIRECTOR



14.11.2018  
DATE

# Appendix III: Certificate of Originality

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## Turnitin Originality Report

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K50/86952/16

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**Appendix IV: Certificate of Corrections**



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This is to certify that all corrections proposed at the Board of Examiners meeting held on 4/10/2019 in respect of M.A/PhD. Project/Thesis defence have been effected to my/our satisfaction and the project/thesis can be allowed to proceed for binding.

Reg. No: KSD/86952/2016

Name: ELSIE AURELIA OCHIENG

Title: MEDIA COVERAGE OF GEOTHERMAL ENERGY IN KENYA:

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