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Government Intervention in Securing Land in Geothermal Rich Areas to Accelerate Exploitation of Geothermal Resources in Kenya

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INTRODUCTION

Land is a major resource in any geothermal development and access to it is a critical requirement. Geothermal development requires a significant amount of land that can provide adequate space for access roads, water lines, well pads, power plants, substations and transmission lines. Land ownership in Kenya consist of community land, Private ranches, Public land and Private land . Successful development of geothermal resources in Kenya has been successful in public land ownership. Land laws in Kenya allows the government to have superior rights in directing the kind of land use in any part of the country. The Constitution of Kenya provides for compulsory acquisition of land and any property that the government deems necessary for the Good of the Nation.

Government intervention can ease access to geothermal rich areas and can help to make it easy and less costly for developers to access the areas.

Majority of land with geothermal potential is owned by the government or community. Access to publicly owned land for geothermal prospecting and development is easier because the relevant government agencies facilitate access. However, access to geothermal prospects in private and community owned land is difficult and costly to the developers.

Government intervention in facilitating access for investors to land in geothermal rich areas will help accelerate geothermal development in Kenya and reduce the high cost and delays normally occasioned by land acquisition by developers.

LAND CHALLENGES AFFECTING GEOTHERMAL DEVELOPMENT IN KENYA

Developers of geothermal resources in Kenya have faced and continue to face challenges in accessing land where geothermal resources are found. In Kenya, land rights influence the exploitation of geothermal power in Kenya to a great extent. Examples of geothermal prospects in Kenya that have faced land access challenges;

Olkaria Geothermal Field: Prospect is located in public land, private land and community land. The portion in the public land (national park) has restrictions imposed by park management, the portion on community land has resistance to access, on privately owned land is costly because land values imposed by land owners is very high and access is limited.

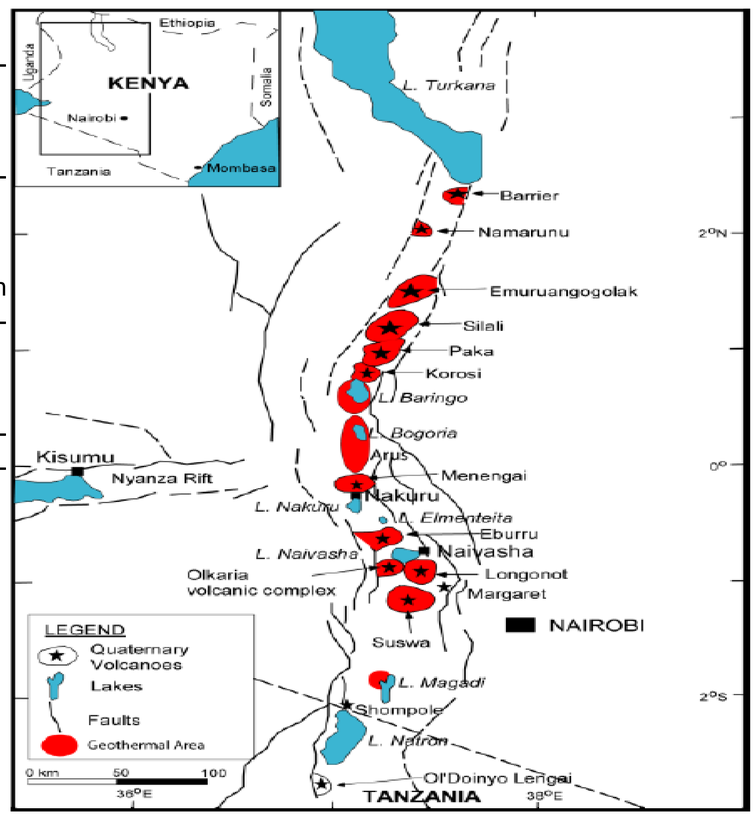
Suswa-Longonot: The prospects are located in a mix of public, private and community lands. Only surface exploration has been done in both. Plans for drilling ongoing. Challenges of access to land for geothermal development—Community resistance, limitations and extremely high costs to access privately owned land, Park restrictions on the use on public land

Eburru-Baadland: The prospects are located in a mix of public, private and community lands. Only surface exploration has been done in both. Plans for drilling ongoing. Challenges of access to land for geothermal development—Community resistance, limitations and extremely high costs to access privately owned land, Forest restrictions on the use on public land.

Other prospects have similar land challenges include: Prospects in **Menengai-Arus**—Mainly private and public land, those to the **Baringo-Paka-Silali-Emuruolongogak-Barrier**—mainly community Land.

LAND OWNERSHIP STRUCTURE IN AREAS WITH GEOTHERMAL POTENTIAL IN KENYA

- Most geothermal potential in Kenya located along the east African rift system
- Majority of the land in geothermal rich areas is community owned land
- Land demarcation has not been done in most of the areas with geothermal potential
- The areas where geothermal development has been successfully implemented are mainly public land



Map of Geothermal Prospects in Kenya

No	Prospect	Land ownership structure	Status of demarcation
1	Lake Magadi	Community and private	Demarcated
2	Suswa	Community and private	Demarcated
3	Longonot	Private and public	Demarcated
4	Elementaita	Private	Demarcated
5	Olkaria	Public and private	Demarcated
6	Eburru	Public and private	Demarcated
7	Menengai	Public and private	Demarcated
8	Bogoria	Public	Not demarcated
9	Korosi	Community	Not demarcated
10	Paka	Community	Not demarcated
11	Silali	Community	Not demarcated
12	Emuruangogolak	Community	Not demarcated
13	Namarunu	Community	Not demarcated
14	Barrier	Community	Not demarcated

OPPORTUNITIES FOR GOVERNMENT INTERVENTION IN ADDRESSING LAND CHALLENGES IN GEOTHERMAL RICH AREAS OF KENYA

The constitution of Kenya bestows the Government as the ultimate owner of all the land within the boundaries of the country. As a result he government can direct on land use especially where matters of national interest are concerned. Blow are the opportunities for government intervention to address land challenges in geothermal areas:

1. **Compulsory land acquisition**—The constitution grants the government the power to compulsorily acquire private land for a public purpose. The government can leverage on this provision to acquire land in geothermal rich areas where the land is private or community owned.
2. **Protection of developers against land aggressors**—Government can use state machinery to protect licensed geothermal developers from any aggression or obstruction of their activities.
3. **Restrict illegal access to geothermal rich areas**—The government can enact laws that restrain allocation of land in geothermal rich areas to individuals and specifically make it a serious crime to illegally encroach or settle on such land.
4. **Beacon and set aside land for geothermal development**—government to compile all information on geothermal resources in the country, complete all the preliminary geothermal explorations and map out the land in geothermal areas and delineate all the land that carry geothermal resources and install beacons that will demarcate such areas
5. **Intervene on community land in geothermal areas**—Government has mandate to engage communities on land matters and to convince them to give out land for geothermal development. Can be done through negotiations, resettlement action plans, compulsory acquisition and negotiated buy outs. Government can develop laws that can promote peaceful coexistence between developers and communities.

HOW GOVERNMENT INTERVENTION ON ACCESS TO LAND CAN BE A CATALYST TO ACCELERATE GEOTHERMAL DEVELOPMENT IN KENYA

Government intervention in unlocking access to land in geothermal rich areas by developers can help accelerate geothermal development in the country in the following ways;

- **Promoting investor confidence**—Investors desire to have assurance of minimal risk to its geothermal investments. Access to land for geothermal development is one of the major risks. Mitigating this risk will incentivize more investors geothermal development.
- **Unlocking financing for geothermal projects**—financiers prefer less risky projects. Geothermal projects with unresolved land issues are not attractive to financiers. Addressing land access issues will unlock financing and accelerate geothermal development
- **Opening access to prime geothermal sites**– Prime geothermal prospects are yet to be developed due to constraints to land access. Government intervention on land access will open these areas for development and in turn accelerate geothermal development in Keny.
- **Promoting harmony with local communities and stakeholders**—Government intervention of unlocking access to community owned land where geothermal potential is present will allow uninterrupted development of the geothermal resources. This will further accelerate the opening of geothermal potential of the country.

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