

CHALLENGES OF HUMAN CAPACITY BUILDING: GDC'S EXPERIENCE

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ABSTRACT

The East African Rift System, which is estimated at having over 15000MWe of clean geothermal energy, covers eleven countries among them being the Republic of Kenya. The development of this high and largely untapped resource has been very slow in Kenya. The country's first 15 MWe unit of the 45 MWe electric power generating plant was commissioned in 1981. It has been operating since then and has proven reliable and economical, running at 98% availability (Ng'ang'a, 1998). The total installed geothermal capacity in the country currently stands at 128 MWe.

Demand for electricity has been on the rise and future growth projection in Kenya requires that urgent initiatives are undertaken to ensure electric energy capacity addition is adequate to cover this demand. One key initiative undertaken by the Government of Kenya is the establishment of Geothermal Development Company Ltd (GDC) as a special purpose vehicle to accelerate the development of geothermal energy resources in the country.

GDC, incorporated on the 2nd of December 2008, robustly began operations in Mid 2009 with the appointment of key members of the top management. With the entrance of GDC into the Kenyan energy sector, there is need, more than ever, to *build capacity* in order to adequately and effectively harness this environmentally friendly resource – the geothermal resource.

INTRODUCTION

Kenya, having been among the first in Africa to tap geothermal energy for the purpose of electric power generation, has made strides, albeit small, in the development of human capacity in the field of geothermal development. Skilled personnel in the areas of resource assessment, exploration, drilling and reservoir engineering, for example, are lacking in Kenya and in Africa as a whole, hence the need for the implementation of comprehensive and systematic human capacity building programmes and initiatives so as to effectively harness this clean natural resource.

What then is the meaning of Capacity Building

Interviews and conversations with a few employees of GDC confirm that the term Capacity Building is at best, loosely defined. Some respondents referred to it as 'staff development', others said it was 'anything that strengthens organizations while others called it, 'developing networks with NGOs for financial aid.

Capacity Building encompasses all the above descriptions and more. The definition that will be adopted in this paper is as follows:

“Capacity Building refers to activities that are designed to improve the performance of an organization by strengthening its employees, leadership, management and overall administration”

To clarify this definition further, Capacity Building includes:

- a) ***Institutional and Legal Framework Development***; making legal and regulatory changes to enable organizations and institutions to enhance their capacities.
- b) ***Organizational Development***; the elaboration and management of relationships between and within the different organizations and sectors.
- c) ***Human Resource Development***; the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables effective performance

CAPACITY BUILDING: THE CASE OF GDC.

Legal and Regulatory Framework Development – The Birth of GDC

The government of Kenya in its endeavor to respond to the anticipated growth of electricity demand from the current 1,080 MWe to 10,000 MWe by 2030, saw the need for rapid geothermal development through the creation of GDC. GDC is a 100% government owned State Corporation under the Ministry of Energy mandated to add 4,000MWe of geothermal power in the next 20 years. As a result of these legal and regulatory changes within the energy sector in Kenya, to say that GDC hit the road running is an understatement. GDC is airborne



at cruising speed and altitude so as to accelerate the delivery of not just 4,000MWe but 5,000 MWe by the year 2030. Capacity building therefore, in terms of the legal and regulatory framework in Kenya saw *the birth of GDC* for geothermal resource development and utilization.

Organizational Development – Managing Stakeholder Relations

For GDC, capacity building is a long-term continuous process in which all stakeholders participate in order to improve governance, leadership, mission & strategy, administration (i.e HR, Financial Management and Legal matters) project management, fundraising and income generation, partnerships and collaborations, evaluation, marketing and positioning. As an organization, the *management of stakeholder relations* is key for the realization of high level organizational development.

The institutional arrangement in the electricity sub-sector in Kenya comprises several companies whose overall activities generally fall under Resource Development, Electricity Generation, Electricity Transmission and Electricity Distribution. The Electricity Regulatory Commission under the Ministry of Energy manages and coordinates activities of these organizations.

There are also other stakeholders whose relations GDC must embrace and consciously develop and maintain: the communities around our operational sites. There are 15 high potential sites that have been identified. These are:- Suswa, Longonot, Olkaria, Eburru, Menengai, Arus-Bogoria, Korosi, Paka, Lake Magadi, Badlands, Silali, Emuruangogolak, Namarunu and Barrier. A number of these sites are located in remote parts of the country with high poverty levels and whose way of life is nomadic in nature due unfavourable and unpredictable weather conditions. Ethnic tension is rife in some of the communities where these high potential sites are located.

The diagram below shows the high potential sites to be explored by GDC vis a vis climatic conditions.



Diagram 1

GDC’s approach in *managing stakeholder relations* has been through their engagement so as to understand their expectations on the issues most important to them and map them against our business priorities. GDCs priority focus areas include support for education, income generating activities/job-creation projects, environmental management initiatives, provision of clean water & sanitation and preservation of art, culture and sports.

Human Resource Development - Through Training

In Kenya, adequate numbers of trained and skilled personnel in the geothermal industry are lacking. GDC has a strong technical workforce of about 420 staff. The following initiatives are being used to develop staff capacity at GDC.

Human Capacity Building Plans & Initiatives at GDC - Mitigation Measures

In order to bridge the skills gap indicated in **Table 3** above, it is envisaged that GDC's staff capacity building will be achieved through various means as indicated below.

Collaboration with Overseas Institutions

Collaboration with various institutions such as BRGM (France), UNU-GTP (Iceland), University of Auckland (New Zealand), University of Kyushu (Japan), BGR (Germany), IRIS (USA), ICS-UNIDO (Trieste & Pisa, Italy), University of Manila (Philippines), University of Aberdeen (Scotland) and University of Potsdam (Germany) will enhance lead to the transfer of knowledge from experts in the geothermal industry to employees on GDC. This shall include both formal training and on-the-job training.

Participation at Major Geothermal Related Workshops & Conferences

Participation in various geothermal forums both locally and internationally has gone a long way in improving our employees' understanding of various concepts in the geothermal field in addition to keeping them abreast with the latest developments in this area. Furthermore, employees at GDC are encouraged to submit papers and make presentations at regional and global conferences and summits hence further clarifying their understanding of the subject matter during research and paper preparation and eventual presentation.

Coaching & Mentoring

Coaching and Mentoring are ways of building human capacity within an organization. At GDC, the principals of **Coaching** (transferring of knowledge through instruction and training) and **Mentoring** (one-on-one wholistic staff development) are of paramount importance in order to build human competencies within the workforce. Line managers and supervisors are encouraged and will continually be required to identify talents amongst their new engagements with a view to building and developing them to achieve higher levels of performance. This in turn will lead to skills and competency improvement.

Institutionalizing of Performance Culture

Human Capacity Building programmes go hand in hand with employee performance. GDC has embraced a culture of performance right at the on-set with the use of the Balanced Score Card approach whereby key deliverables in a given year are directly linked to the overall score card of the organization. This way each employee knows what is expected on him and strives to meet each of their targets by the end of the agreed period. It is during performance assessment interviews that skills gaps are identified and corrective measures taken to improve performance.

Provision of Attractive Performance Rewards & Incentives

As part of GDC's performance culture, an attractive performance incentives scheme has been developed to reward exceptional performance. We believe that exceptional performance must result in exceptional rewards. Hence, as employees seek to achieve and even surpass performance targets, their skills consequently get sharpened and enhanced. This in turn translates to improved human capacity within the organization.

Employee Self Development

An environment in which employees are encouraged to actively develop themselves provided it does not interfere with their duties, must exist if Human Capacity Development is to thrive. At GDC, several employees who received scholarship in technical studies have been given time off (unpaid leave) by the company to pursue further training overseas so as to build capacity within GDC.

Talent Management Initiatives

It is said that talent is sometimes like a parachute. If it is not there, you may not need it again! In order to retain talent once identified and developed, one has to manage it, so as to help reduce the risk of mass exodus of skilled technical personnel to competitor companies whether locally or overseas. At GDC, cost effective short-term incentives such as provision of paid day offs, commendation letters, dinner with the management team and employee of the year awards shall be employed to management her desired talent. Long-term and more costly incentives include use of flexi-time for high performers, annual overseas holidays with spouse & children and repayment of staff outstanding loans just to mention a few.

Establishment of a Regional Geothermal Training Institute

Establish a state-of-the-art Geothermal Training Institute that will make the access of specialized training locally available. This institute will also facilitate the transfer of knowledge especially in technical and other specialized areas.

Challenges

In any human capacity building programme, there will always be challenges and GDC is not an exception.

Legal/Regulatory Framework

Challenges in Legal/Regulatory Framework Development have been in the

- i. Acquisition of land at potential sites
- ii. Acquisition of property eg office blocks, rigs etc, critical for operations

Organizational Development

Challenges in Organizational Development:

- i. Effective management of stakeholder relations
- ii. Effective management of Donor/investor relations

Human Resource Development

Challenges here include:

- i. Development of Systems & Structures from scratch
- ii. Managing Diversity
- iii. Creating the desired culture

CONCLUSION

In conclusion, capacity building encompasses a country's human, scientific, technological, organizational, institutional and resource capabilities. It is the creation of an enabling environment with appropriate policy and legal frameworks, institutional development and human resource development and the strengthening of managerial systems.

Capacity building initiatives are not done over night neither are the results realised at once. It is a long-term, continuing process, in which all stakeholders participate for the good of all.

The journey to build capacity in the geothermal industry has just began GDC. It is a journey that will see us through challenges that we shall bravely overcome and learn from, in order to deliver cheap electric energy to Kenyan citizens and beyond.

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