

“The outlook on nuclear energy potential for developing countries: the East African region case”

BY

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Introduction :

**President of United State of America Dwight Eisenhower
“Atom for Peace” speech to the United Nation
Announced that USA would build NPP to provide abundant
,Clean , affordable Energy**

The paper focus on Institutional ,Legal and regulatory frame work ,Policy regime of Nuclear Energy dev .

Kenya's Scenario

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governs the country Energy sector

To promote Equitable Access to Quality Energy Service at the least Cost while protecting Environment as envisaged in the policy paper

Vision 2030

To be a competitive , middle income industrious country

Policy instruments that have been drafted to support Nuclear Energy

- ▶ Draft Energy Bill 2014
- ▶ Draft Energy Policy 2014 [Balanced & Diversified Energy Basket]
- ▶ Environmental Mgt & Coordination Act (EMCA)
- ▶ Kenya Nuclear Electricity Board
- ▶ International Instruments (Kenya is keen on having them Ratified)
 - ▶ The convection early of Notification of nuclear Accidents
 - ▶ The convection for assistance in the case of Nuclear Accidents or Radiological Emergency
[to Meet Challengers of Chernobyl, Fukushima Nature]
 - ▶ The joint Convection on the Safety of spent fuel mgt on Safety of Radio active waste
as Recommended by the (IAEA)
- ▶ Other Broader Policy frame work in[EACC, Economic sabotage ,Macro Economic Environment , Energy Regulatory Commission]
- ▶ Favourable Political Climate

Tanzania `s Land scape

Shift of Economic Policies in the 1980 (In Favour of Capitalist system)

To take into account Global economic Systems

Increased FDI and Multinational into the country

Discovery of Uranium & Radio active Material as well as Significant Discovery of Hydrocarbons

The Beneficiation Argument

Among institution frame work

Tanzania Atomic Energy Commission (still faces Challenges e.g. technical and Human capacity IAEA)

Among The legal frame work :

- ▶ establishment of Atomic Energy Bill
- ▶ National Policy Science and Technology (revised and Amended in 1995)
- ▶ Favourable Political Climate
- ▶ Stable Macro Economic Environment

Uganda's Land Scape

- ▶ Beneficiation Arguments
 - ▶ Deposits of Uranium concentrates ,Hydrocarbon, copper.
 - ▶ Manufacturing and industrial sector (upwardly mobile) .
- ▶ National Developmental Blue print (vision 2040)
 - ▶ Social Economic transformation Agenda (envisaged in 2040)
 - ▶ The low Generation (822mw) and consumption rates 215kwh per capita per year
Africa has an Average consumption rate of 552kwh per capita per year
 - ▶ Envisages part of uranium reserves for power generation
- ▶ Economic perspective Argument
 - ▶ Resource Nationalisation policy as a for Natural resource
 - ▶ Cost of Electricity production
 - ▶ Local content
- ▶ Favourable Political Climate
- ▶ Macro Economic Environment

Rwanda's Land Scape

- ▶ Indication to ratify the international Atomic Agency Treaty (for civil Use)
Health Sector ,water ,Agriculture ,Environment
- ▶ Rwanda's parliament adopted a Bill and a law is yet to be promulgated by the H.E President .
- ▶ Extraordinary land scape lake kivu site
- ▶ Current generation 563Mw with only 186Mw serves the Population of 10 Million
- ▶ Energy Source : Solar ,Hydro,Methan gas
- ▶ Rebalancing Energy Mix (Factor in Nuclear Energy)
- ▶ Favourable Political Climate
- ▶ Macro Economic Environment

Policy Recommendation

- ▶ The Above study Clearly indicate inadequate legal regulatory frame work as well as the policy regime .
- ▶ East African countries should put in place Energy Research Centres
 - [To deal with Specifically Nuclear Energy Technology may be adopt a SPV Model]
- ▶ Broader Stake holder Engagement
 - ▶ [On Environmental and Safety Requirements]
- ▶ Public Sensitization ,Civic Education, information,
- ▶ Effective communication and consultation with all stake holders
 - ▶ Important for industry and Government to Constantly dialogue
- ▶ License applicants should submit a detailed demonstration of Safety requirements

Country	Strategy	Regulation	Technology
Kenya (KE)	<ul style="list-style-type: none"> ➤ Political Climate ➤ Beneficiation Argument ➤ Macro Economic 	<ul style="list-style-type: none"> ➤ Draft Energy Bill 2014 ➤ Draft Energy Policy 2014 ➤ Environmental Mgt co-ordination Act ➤ KNEB 	<ul style="list-style-type: none"> ➤ Intention to have Gen 4 ➤ Energy Research Centre
Uganda (Ug)	<ul style="list-style-type: none"> ➤ Political Climate ➤ Beneficiation Argument ➤ Uranium Deposits ➤ Macro Economics 	<ul style="list-style-type: none"> ➤ NEMA 	<ul style="list-style-type: none"> ➤ Intention to have Gen 4
Tanzania (TZ)	<ul style="list-style-type: none"> ➤ Political Climate ➤ Beneficiation Argument ➤ Uranium Deposit ➤ Macro Economics 	<ul style="list-style-type: none"> ➤ NEMA ➤ ATOMIC Energy Bill 	<ul style="list-style-type: none"> ➤ Intention to have Gen 4 ➤ National Science &Tech
Rwanda (RW)	<ul style="list-style-type: none"> ➤ Political Climate ➤ Beneficiation Argument ➤ Macro Economic 	<ul style="list-style-type: none"> ➤ NEMA 	<ul style="list-style-type: none"> ➤ Intention to have Gen 4

Conclusion

- ▶ East Africa's Direction in Respect to Nuclear Energy
 - ▶ Christopher's Columba's Analogy
- Nuclear is Africa's direction

▶ “If You Want a Story to be Told ,then tell it your Self ”

Agnes Gitau (GBS Africa partner)

Thanks You