



TANZANIA NATIONAL ENERGY REPORT

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International Conference:

Fostering Cooperation in Energy Efficiency and Accessibility in East Africa

13-14 March, 2017. Zanzibar, Tanzania





Introduction

Key Points

- ❑ National framework in Tanzania
 - ✓ Legal framework
 - ✓ Key stakeholders in energy sectors
 - ✓ STI support services on energy access
- ❑ Opportunities & challenges on energy access and efficiency
- ❑ Opportunities of STI
- ❑ Roles of HEIs
- ❑ Conclusion and recommendation

National Framework

 **Legal frameworks** for energy resource management and development is governed by various Acts of the Parliament including:-

 The Electricity Act; The Petroleum (Exploration and Production) Act, The Rural Energy Act; Environmental Management Act; the Atomic Energy Act, the Water Resources Management Act, the Land Act; the Natural Gas Policy (URT, 2015) and etc.

Policy objectives:- To establish an efficient energy production, procurement, transportation, distribution and end-use systems in an environmentally sound and sustainable manner.

National Framework

Key stakeholders in the energy sector:-

-  The Ministry of Energy and Minerals, Water and Natural Resources
-  Government Institutions - NEMC, COSTECH, TANESCO, REA, TPDC, NBS, EWURA, VPO-Environment, Universities and Training Colleges e.g., VETA, DIT etc
-  Development partners - UNIDO, UNDP, USAID etc
-  Other organizations -NGO's, Sector Associations and Commercial companies.
-  End-user (Consumers) - households, farmers, business organization e.g., manufacturing/service firms,

National Energy Framework

❑ STI support services on energy access

- ❑ Energy access and efficiency is a current issue of global concern.
- ❑ Energy shortage and poverty have become a major factor hindering the economic growth, and development in Africa.
 - ❑ Energy policy emphasizes STI support on energy access.
- ❑ Despite the role of STI on energy access, yet the extent to which STI support energy access and efficiency in Tanzania is to be established.

Opportunities and Challenges on energy access and efficiency

Opportunities:-

- ❖ Increase of revenue collection in relation to energy project investments.
- ❖ Investment opportunities in exploration, production, transportation of energy.
- ❖ Improved social services and economic activities in Tanzania.

Challenges:-

- ❖ Lack of enough resources to implement national energy.
- ❖ Knowledge and capacity - limited expertise in the energy projects.
- ❖ Inadequate local institutional framework that facilitate energy access to all.
- ❖ Inadequate resources to fund energy sector reform.

❖ Inadequate sensitization forums on energy access and efficiency

Awareness of the real needs & opportunities of STI Support

- ❖ Significant efforts have been made by the Government of Tanzania to create awareness on the real needs and opportunities of STI in the society. E.g., the adoption of the National Science and Technology policy.
- ❑ The government initiatives includes:-
 - ❖ The establishment of Commission of Science and Technology (COSTECH).
 - ❖ Establishment of the Ministry of Science, Technology and Higher Education.
 - ❖ A review of national Science, Technology Policy.
 - ❖ Establishment of the NM-IST.
 - ❖ Establishment of the Life Sciences Governance Center.
 - ❖ The center of excellence in agricultural biotechnology (NABC).

Role of Higher Education Institutions

- Develop curricula on energy technologies i.e., certificates, Diploma, Bachelor Degree and Master Degree levels.
- Support Government efforts on implementation of strategies for support research, innovation and knowledge exchange.
- Train qualified staff for STI support initiatives as part of capacity building at Institutional level.
- Conduct research on energy access and efficiency, and inform the society through different forums.
- Promote and strengthen development of local people in energy field example to develop local expertise i.e., formal and informal groups.

Conclusion and Recommendations

❑ HEIs should conduct training in the following:-

- ❖ Role of collaboration in energy sectors
- ❖ Environmental conservations
- ❖ Roles of Sustainable STI in enhancing energy access and efficiency
- ❖ Importance of energy policies and programs in supporting energy production and use in energy sectors
- ❖ How energy access can be sustained in disadvantaged areas
- ❖ Roles of Sustainable STI in enhancing energy access and efficiency

Conclusions and Recommendations

- ❖ Enhance the use of renewable energy in areas which are not connected to the national grid of electricity.
- ❖ Promote the use of energy saving (i.e., cooking, heating & lighting) in order to preserve the environment.
- ❖ Promote research projects on energy technologies (develop and commercialize energy sources).
- ❖ Training on energies should be offered to all education levels to develop energy access and efficiency spirit to entire community.
- ❖ Promote research collaborations within and abroad as a means to share experience and transfer of technologies to the local context.
- ❖ Political-institutional support should be encouraged to speed up the rate of STI support on energy access and efficiency.



Thank you

Ahsanteni sana kwa usikivu wenu