

RENEWABLE ENERGY FOR SOCIAL- ECONOMIC DEVELOPMENT IN TANZANIA

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Tanzania Parliamentarians Friends of Environment
(TAPAFE)

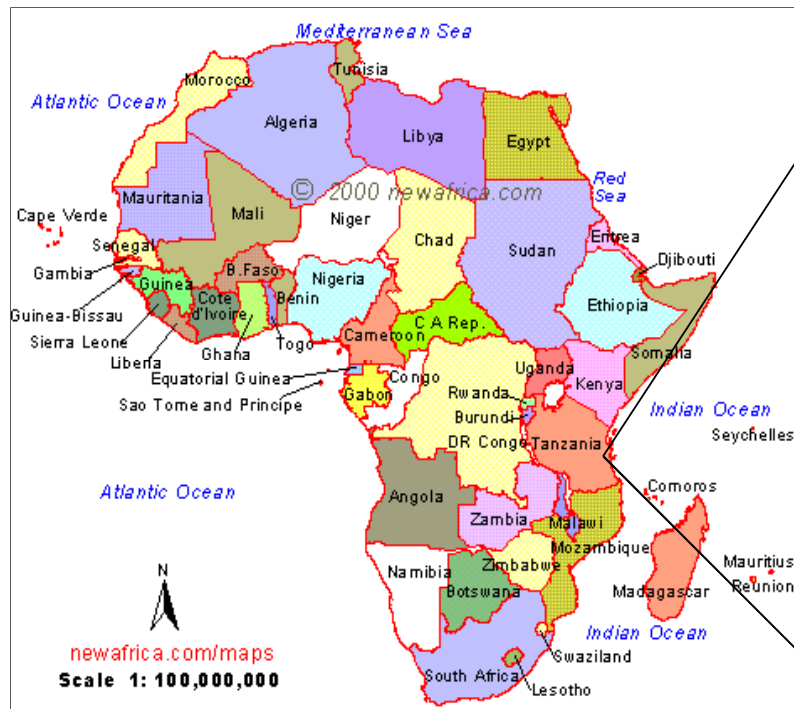
Outline

- Country Profile and Location
- Basic Facts of Electricity Supply in Tanzania
- Legislative Framework
- Available Energy Resources
- Achievement and Challenges in RE Development
- Tanzania Parliamentarians Friends of Environment
- Role of Members of Parliament
- TAPAFE Experience and Plan of Action
- Conclusion

Country Profile

- Land area 951,000 sq km,
- Population 44,928,923 (Census 2012)
- People in Rural 77% and Urban 23%
- Politically Stable country
- For the past five years Tanzania economic growth rate is between 6 – 7 %.
- Electricity consumption is very low, while demand forecast to grow rapidly, nearly doubling in the next 3 years
- **Economy Predominantly Agricultural Based / Mining and Tourism are significant**

Location



Basic Facts on Electricity Supply in Tanzania

- In 2011 the total Installed capacity was 1501.24 MW from: Hydro 561.84 MW, Thermal (Gas 501 MW and Fuel 438.40 MW). By 2015 to increase access to 3000 MW
- Tanzania imports 12 MW from Zambia and Uganda
- Generally the average access to electricity has increased from 10% (in 2010) to 22% (in 2013). It is planned to increase the access to 30% by 2015.
- Rural Energy Agency (REA), is for furthering electrification programs via the Rural Energy Fund (REF), by facilitating modern rural energy projects and services, and promote technical assistance to developers .

Legislative Framework

- National Energy Policy, 2003
- Energy and Water Utilities Regulatory Authority Act, Chapter 414 of the Laws of Tanzania,
 - Establishing EWURA and operations started February, 2006
- Rural Energy Act (2005)
 - Establishing REA & REF
- The Electricity Act, 2008
 - ❖ Confers power for regulation of the Electricity Services.
 - ❖ Emphasizes light handed regulation on small power production

Available Energy Resources

Proven Potentials:

- Hydro 4.7GW (developed only 12%);
- Natural Gas (45 Trillion Cubic Feet of Reserves);
- Coal (1.2 Billion Tones of Proven Reserve);
- Small Hydropower 480 MW (developed only 3%);
- Geothermal 650 MW (under assessment);
- Solar (4 – 7 KWh/m²/day); Wind Energy (8 – 9 m/s in Central Tanzania and Southern Highlands);
- High Uranium potentials
- Biomass - in form of solid, gaseous and liquid .

Achievements in Renewable Energy

- Institutional framework in place, as well as some elements of the policy and regulatory frameworks;
- Completion of a number of projects in mini-micro hydroelectricity, biomass, wind and solar energy (grid-connected or off-grid);
- Geothermal development at early stages;
- Ongoing mapping of wind resources under 7 sites, as well as a number of feasibility studies for mini and small hydro.

Challenges for the Development of Renewable Energy

- Climate variability impacts on hydropower resources;
- Inadequate human capacity with technology know-how;
- Lack of awareness for decision makers, financial institutions;
- High initial investment capital costs;
- Lack of proper regulations for feed-in tariffs;
- Inability to afford to pay for electricity services;
- Lack of proper infrastructures;
- Limited local manufacturing capacity;
- Private Sector not adequately sensitised.

Tanzania Parliamentarians Friends of Environment (TAPAFE)

- This is a group of parliamentarians in Tanzania committed to:
- Sustainable development
- Climate change, renewable energy and
- Ensure Tanzania improves its energy mix by increasing the use of cleaner energy, from renewable resources.

Role of Parliamentarians

- As Members of Parliament in their legislative, oversight and representational responsibilities have a role to play. They make laws, pass budgets and have oversight functions over the executive.
- Parliamentarians are strategically placed to make things happen. They need to support and put in place appropriate national legislation and policies that would promote renewable energy.
- They can champion the ratification, domestication and enforcement of UN agreements on reducing carbon emissions and increasing clean energy access.
- Increase budget allocation for renewable energy initiatives.

TAPAFE Experience

- The Constitution of Tanzania stipulates that, the President can resolved the Parliament, if the MPs rejected the whole national budget.
- TAPAFE mobilized other Members of Parliament, to refused to pass the Budget for the Ministry of Energy and Minerals, until the Minister agree to introduce a fund for improving increased Rural Energy Electrification. Now the electricity access has increased from 10% in 2011 to 22% (in 2013) due to increased rural electrification by REA.
- The main grid is very far away from most rural areas, REA increase access through renewable energy sources min grids (min hydro, solar, wind).

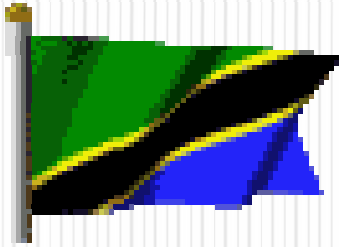
TAPAFE Way Forward

In order to improve the use of Renewable Energy in Tanzania:

- TAPAFE has Developed an Action Plan.
- Advocate for Renewable Energy Policy development.
- Build the Capacity of Members of Parliament, civil society, businesses and the communities.
- Lobby for an increased percentage of the budget for Renewable Energy.
- Networking with National, Regional and International Organisations.

Conclusion

- The Government of Tanzania is determined to develop the renewable energy resources.
- Reliable, affordable and environmentally friendly energy services power projects will continue to be a key ingredient in supporting Tanzania in its fight against poverty and for sustainable development.



END

**Renewable Energy Can Play a
Pivotal Role for Social -
Economic Development**