

COMESA BIOMASS AND BIO-ENERGY POLICIES FOR SUSTAINABLE DEVELOPMENT

BY

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OVER-ARCHING REGIONAL PROBLEM

- **FOOD INSECURITY – 400 Million people in COMESA including 19 countries.**
 - » **Smallholder farmers most affected**
 - » **Pastoralists most vulnerable to poverty and food insecurity**
 - » **Rising food prices have exacerbated the problem**
- **FOOD PRODUCTION & PRODUCTIVITY IS LOW**
 - » **Climate change is one causative factor (droughts/floods)**
 - » **Soil fertility has been depleted due to poor farming practices and rampant deforestation**

REGIONAL ECONOMIC GROWTH AND INTEGRATION

- TO ATTAIN REGIONAL ECONOMIC GROWTH AND INTEGRATION COMESA HAS DEVELOPED THE FOLLOWING STRATEGIES;
 - » ATTAINMENT OF FOOD SECURITY THROUGH AGRICULTURAL DEVELOPMENT (CAADP Process started in COMESA)
 - » PROMOTION OF TRADE OF FOOD STAPLES IN THE WHOLE REGION TO INCREASE ACCESS TO FOOD BY ALL PEOPLE
 - » DEVELOPMENT OF POLICIES IN;
 1. FORESTRY RESOURCE UTILIZATION AND
 2. BIO-ENERGY SERVICES PROVISION TO SUPPORT SOCIAL AND ECONOMIC DEVELOPMENT WHILE PROTECTING THE NATURAL RESOURCES AND ENVIRONMENT

THE FORESTRY STRATEGY/POLICY

- **THE STRATEGY'S AIM IS;** to maximize the contribution of forests and trees to the economic, social and environmental well-being of African people taking into account the multiplicity of forest functions.
- **The strategy will address the following key issues:**
 - Improving policy, legislative and planning frameworks;
 - Strengthening institutions and capacity in the strategic design and implementation of policies and legislation;
 - Increasing investment in sustainable forest management and enhance availability of forest goods and services; and
 - Complementary investment into the development of value-adding industries and supporting infrastructure.

COMESA STRATEGIC ACTIONS

- **COMESA Treaty includes: Investment and development in agriculture, Natural Resources and environment, crop, livestock production, fisheries and forestry.**
- **COMESA member States have agreed to Conserve and manage forests through joint promotion of joint forest practices, management of water catchment areas,**
- **Member States will have joint utilization of forest training and research facilities, establish uniform regulation for utilization of forestry resources in order to reduce the depletion of natural resources and avoid desertification.**
- **Trade in a range of forest products from the COMESA region was already globally significant E.g.**
 - » **Member countries are among the leading exporters of timber and non-timber forest products. The Democratic Republic of Congo is the fifth largest exporter of tropical logs.**
 - » **Sudan provides 40-50% of global supplies of gum Arabic, while ;**
 - » **Ethiopia, Eritrea, Sudan and Kenya are leading exporters in a number of valuable flavours and fragrances (frankincense, opopanax, myrrh).**
- **Recognizing that natural resources provide an important opportunity for forest-driven economic development , COMESA is completing the FORESTRY POLICY DEVELOPMENT PROCESS.**

COMESA strategic ACTIONS CONT'D

- **The COMESA member States have adopted the Environmental Action Plan (EAP) and the Comprehensive Africa Agricultural Development Plan (CAADP)**
 - » **Stresses the need for the region to adopt common policies and strategies on sustainable utilization of natural resources.**
 - » **CAADP stresses on 6% ANNUAL Agricultural growth rate from current 2.5%.**
- **COMESA Ministers of Agriculture Meeting, held in Seychelles in March 2008, adopted the Fifth Ministerial Declaration to re-affirm the major role that Natural Resources and Agriculture plays in economic development of the COMESA region.**
 - » **Meeting urged COMESA Secretariat to expedite the formulating of the regional strategy on forestry management, including strategies for climate change and carbon trading.**

COMESA BIO-ENERGY POLICY FRAMEWORK

- **Energy plays critical role in the development process:**
 - Domestic Use
 - Industrial and Agricultural production
 - Energy as a factor of production has costs that directly affects prices of other goods and services and the competitiveness of enterprises.
 - Energy is widely seen as a driver to achieving Millennium Development Goals (MDGs).

COMESA MODEL ENERGY POLICY FRAMEWORK

- **GOAL: To provide the COMESA member States with harmonized guidelines that would facilitate energy policy harmonization in the COMESA region in efforts to improve efficiency and increased investment.**

SPECIFIC OBJECTIVES OF THE COMESA ENERGY MODEL POLICY FRAMEWORK

- Provide an outline of contents expected in National Energy Policy,
- Member States to adopt and/or customize, therefore, harmonizing policies in the spirit of regional integration.
- Improving the effectiveness and efficiency of the modern energy supply industries;
- Improving the security and reliability of energy supply systems;
- Increasing access to affordable and modern energy services as a contribution to poverty reduction;
- Establishing the availability, potential and demand of the various energy resources;
- Stimulating economic development;
- Improving energy sector governance and administration;
- Managing environmental, safety, and health impacts of energy production and utilization; and mitigating the impact of high energy prices on vulnerable consumers.

ENERGY POVERTY IN COMESA

- It has been established that energy poverty could be defined as the absence of sufficient choice in accessing adequate, affordable, reliable, quality, safe, and environmentally benign energy services to support human and economic development. It is therefore, apparent that energy poverty exists in many COMESA member States at all levels, particularly in the rural areas.

ENERGY POVERTY IN ABUNDANT ENDOWMENT

- **Energy poverty manifests in many forms;**
 - **Low levels of consumption of modern energy forms in terms of electricity and petroleum products in most COMESA member States.**
 - **heavily reliance of most COMESA member States on the consumption of traditional energy which is primarily biomass in terms of wood-fuels (fuel-wood and charcoal**
 - **Inadequacy and poor quality of electricity services.**

The COMESA Model Energy Policy Framework and the COMESA Treaty Articles 106 – 109

- **Areas of Cooperation:**
 - **Joint development and utilization of energy resources(hydro, fossil and bio-mass etc);**
 - **Joint exploration and exploitation of hydro and fossil fuel;**
 - **Creation of more favorable investment climate to encourage public and private investment in this sub-sector;**
 - **Encouragement of joint utilization of training and research utilities;**
 - **Exchange of information on energy systems and investment opportunities;**
 - **Development of research programmes on renewable energy systems;**
 - **Development of a mechanism for facilitating trade in energy fuels, such as coal, natural gas, petroleum and electricity;**
 - **Joint procurement of products; and**
 - **Interconnecting national electricity grids.**

ENERGY STATUS IN COMESA

It is worth mentioning, that the energy sector in almost all COMESA member States includes the following sub-sectors:

- Electric power;
- Petroleum;
- Gas;
- Coal; and
- Biomass and other Renewable Sources of Energy.

PETROLEUM

- COMESA region's crude reserves as of 2004 were about 12.3 billion barrels (12.2 % of Africa and about 1.0 % of the world crude reserves).
- The region produced about 1.9 million barrels per day (bb/d) of oil in 2004. It was about 22.1 % of Africa's and about 2.4 % of the world's production.
- The region's top oil producers, in descending order of magnitude, were Angola, Egypt, Sudan and Congo DR.
- Regional petroleum exploration, efficient use of petroleum particularly in transport sector through diversion of traffic to petroleum saving transport systems, harmonization of: laws, rules, standards, regulations, specifications, safety procedures of petroleum products, etc, would be key issues of concern to the COMESA region and they are attainable through harmonizing energy policies.

GAS

- **Six COMESA member States had proven gas reserves, in 2004;**
 - Angola (Producing)
 - Congo DR,
 - Egypt (producing)
 - Ethiopia,
 - Rwanda and
 - Sudan,
- **Most COMESA member States lack appropriate gas infrastructure for production, distribution and processing.**

COAL

- The COMESA region has no abundant recoverable coal reserves. The reserves are only 1.7 % of Africa's reserves.
 - Zimbabwe (with 60 %) and
 - Swaziland (with 25 %)
 - Total coal consumption of the COMESA region, in 2004, was about 6 million short tones, representing about 3.0 % of Africa's consumption.

Biomass and other Renewable Sources of Energy

- Renewable energy resources include biomass in terms of:
 - » wood-fuels (fuel-wood and charcoal),
 - » agricultural residues and animal waste;
 - » solar;
 - » wind;
 - » small hydropower;
 - » geothermal;
 - » bio-fuels (E.g. Jatropha, maize, cotton seed, soya)etc.
- One of the disadvantages of using biomass is that, the consumption of wood-fuels could essentially contribute in the depletion of forest resources, which, in turn, has a negative environmental impact in terms of accelerating climate change, threatening biodiversity and increasing erosion.
- It has been argued that the smoke generated in the use of fuel-wood has negative health impact on women and children. And the efficiency of the end use of non-commercial fuel is very low.
- However, supply of biomass could be increased by increasing the productivity of the existing forest resources, establishing new forests and encouraging the alternatives like solar energy by increasing their supply, in addition to improving the technology and raising the efficiency of wood-fuels production and consumption.

NUCLEAR ENERGY

- Some Uranium deposits have been identified in the COMESA region such as Malawi, Congo DR and Zambia (started mining). This can lead to working out a nuclear long-term energy programme for the future and thereby sufficient supply of electricity would be secured.
- Prospecting and exploring for uranium are to be promoted because of its strategic importance and potential future economic impact.
- South Africa is the only African country that produces nuclear energy.

Issues considered in the Model Policy Framework

- **Energy Efficiency and Conservation,**
- **Secondary stage (Energy conversion, transmission and distribution),**
- **End use of energy (productive and non-productive activities).**
- **Improve Effectiveness and Efficiency of the Commercial Energy Supply Industries**
- **Improve the Security and Reliability of Energy Supply Systems**
- **Increase Access to Affordable and Modern Energy Services as a Contribution to Poverty Reduction**
- **Establish the Availability, Potential and Demand of the Various Energy Resources**
- **Improve Energy Sector Governance and Administration**
- **Manage Environmental, Safety, and Health Impacts of Energy Production and Utilization**
- **Mitigate the Impact of High Energy Prices on Vulnerable Consumers**
- **Supply and Demand side issues.**

CONCLUSIONS & RECOMMENDATIONS

- **The COMESA Energy Policy and Forestry Strategy/policy could lend themselves useful as a models for developing similar policies for other African countries,**
- **Energy and forestry resource development are closely related to Food Security attainment and**
- **Sustainable development of the sectors will help the COMESA Region achieve its Regional Integration goal and the attainment of Food and Nutrition Security.**

**THANK 'U' FOR
YOUR
ATTENTION**