

Promote sustainable biomass energy production and utilization

By Racheal Nalule, Program officer, Environmental Alert, Secretariat for the Renewable energy CSO Network

The national total primary energy is comprised of 88% biomass energy, 10% fossil fuels and 2% electricity (Draft Energy Policy, 2019). The biomass energy use is for domestic 74%, industry 18% and institutions and SMEs 8% (Biomass Strategy 2013). The Uganda population is estimated at about 40.3 million and projected to reach 55.4 million by 2030 (UBOS Statistical Abstract, 2019) at an annual growth rate of about 3.2%. Biomass energy will still be a major source of energy in the medium to long term given the increasing demands for energy by the growing population. Over 95% of the population especially in the rural areas depends on firewood for domestic energy. The influx of about 1.4 million refugees to Uganda further increases the demand on biomass energy estimated to be 1.6 million M3 of fuel wood per annum (WB/FAO, 2018).



Thus, biomass is still and will remain an important source of energy for Uganda. Therefore, the need for investment in its sustainable production and utilization. Unfortunately, biomass energy continues to be unfairly maligned by a cross section of people including decision and policy makers. Statements such as dirty, backward, cooking fuel, unsustainable, unhealthy, environmentally harmful are very common. Yet some sources of energy such as fossil fuels do not attract the same level of demonization and criticism like biomass.

Relatedly, the positive attributes of biomass energy such as its enormous contribution to Uganda's economy and energy mix, potential to generate jobs and incomes, and Uganda's best climatic conditions that support fast growth and accumulation of biomass are rarely accorded the publicity they deserve. It is unfortunate that the role of cooking energy is often down played as if it is possible to have a healthy and productive population that does not cook food and drink boiled water!

In the area of value addition and industrial production, biomass energy is widely used for tobacco and tea curing, pottery and ceramics, cement and lime production, and brewing and brick making. The total energy consumed by the industry sector in Uganda is dominated by biomass contributing over 68%, followed by electricity. What other known fuel can be used to cure tea or tobacco, or roast meat and impart that unique aroma and taste if not biomass! Additionally, biomass value chains are entirely owned and controlled by Ugandans unlike other sources where Ugandans play a minor role or come in just at the tail end to pick residual businesses when almost all the benefits have already accrued to foreigners.

However, it is critical to recognize that biomass by its nature has low financial appeal compared to other sources of energy. This partly explains the low level of investment and general interest in the sub sector. On the other hand, other sources of energy are characterized by international value chains with high financial appeal and attracting big investments. A Life Cycle Assessment of these energy sources reveals that they are neither cleaner nor more sustainable than biomass. The biomass energy sub sector is largely informal, and can hardly attract lobbyists, big local and international players to undo the injustices and

misinformation levelled against it. But it also lacks well researched data and information to convince top decision makers to have it among government priorities.

Much as shortages of petrol and diesel or power outages. *Why is the former rarely felt at the policy level and easily noticeable for the transport and power sectors? Could it be that biomass energy is for the poor and disadvantaged with no voice and other fuels are for the rich whose slight discomfort is a concern and cause of outrage for everybody?* Indeed, there is no single source of energy that can meet all the energy needs of the population.

Thus, complementarity of different sources is key in ensuring energy security and fostering national development. This makes it the more compelling reason why government should also consider to priorities development of the biomass sources in the ongoing policy review processes and National development plans.

Some of the recommendations to develop the biomass sub sector moving forward include: *Ministry of Energy and Mineral Development (MEMD) should address the biomass energy production as priority within the energy sector; Ministry of Finance Planning and Economic Development (MoFPED) should increase the allocation of funds for biomass energy production to Ministry of Energy and Mineral Development and Ministry of water and environment (MWE); MoFPED needs to provide the private sector with incentives to support investment in dedicated biomass energy plantations and efficient biomass energy production and use technologies. These incentives include performance grants, soft loans, tax waivers and subsidies.*

MWE, MEMD and Local Governments to strengthen regulation and enforcement of laws, ordinances and byelaws throughout the value chain of biomass energy resources especially charcoal to reduce the loss of forests, raise revenues for re- investment in biomass energy production and create a conducive environment for the private sector to invest in biomass energy production; MWE should promote the establishment of dedicated large scale biomass energy plantations in all the seven Forest and Land Restoration landscapes.