

A Monthly from the East African Sustainability Watch Network founded by Uganda Coalition for Sustainable Development (UCSD), Tanzania Coalition for Sustainable Development (TCSD) and SusWatch Kenya

Kenya's COVID-19 Stimulus Package Could integrate a Low-Carbon Development Pathway



Installing a Solar PV unit:
Photo: TaTEDO

According to UNECA (2020), Africa remains at the forefront of the impact of climate change, which could lead to a 15 per cent reduction in GDP in West and East Africa by 2050. Governments must prioritize fiscal stimulus that is focused on low-carbon development pathways. Emissions must decline substantially between 2020 and 2030 and reach net-zero by 2050 if the continent is to stay on track to reach the temperature goal of the Paris Agreement

With lack of access to other forms of energy, people in many African countries depend substantially on the burning of biomass for their energy needs. This also increases land degradation and encroachment into natural habitats. These factors, which increase the chances of human contact with wild animals, also increase the risk of zoonotic diseases (WHO, 2018).

As such, COVID-19 is an indication of things to come without urgent and global action to tackle climate change, which will likely kill many more people than have died in recent pandemics. In fact, WHO has estimated that, in a business-as-usual scenario, climate change will result in an additional 250,000 deaths per annum worldwide from malnutrition, malaria, diarrhea and heat stress between 2030 and 2050.

Currently, 75% of the Kenya's installed electricity capacity comes from renewable energy (Ministry of Energy, 2019). Kenya announced plans to move to 100% green energy by 2020, as it scales up renewable investment. With an eye on sustainable development, Kenya aims to mitigate climate change by reducing Kenya's carbon footprint, while creating much-needed jobs. The move came as the country looks to triple the number of people connected to its power grid, to reach 60% of the population.

On March 30, 2020, President Uhuru Kenyatta announced stimulus measures including some tax relief for businesses that is expected to forfeit \$1.1 billion in revenues over the next three months. While this is laudable, Kenya could go an extra step by taking strides in support of a low-carbon development pathway. This is because many renewable technologies can be ramped up relatively quickly, with potential positive impacts on ordinary Kenyans through creating jobs, while at the same time reviving industries.

Unfortunately the COVID-19 pandemic could impact on Kenya's plan towards 100% green energy. For now the immediate priority remains to save as many lives as possible, bring the health emergency under control and alleviate hardship. At the same time, governments are embarking on the monumental task of devising stimulus and recovery packages. These are at a scale to shape societies and economies for years to come.

But it is also important to consider decentralized local energy and climate solutions that can catalyze job creation, support value addition and allow for greater involvement by citizens and communities in energy decisions, with transformative socio-economic incidentals. In particular, such solutions can hope to improvement of social services like health care in energy-deprived communities.

Uganda's 'Wonder' Floating Islands Now Turn Horrible



Clearance of the floating island debris at the Nalubaale power dam. Photo: Eskom Uganda Ltd

In 2015, a 'wonder' floating island measuring about 2 acres got curved from the mainland before commencing its float in the Munyonyo and Bukasa Bay area (near Kampala), with frequent changes in the direction as it drifted from one point to the other. As a result of the anxiety it created, a range of leisure seekers most of which are local people flocked the area to have a look at this wonder floating Island with well-maintained gardens of cassava, maize, beans and bananas in harmony with the natural vegetation.

According to Prime Safaris - a tour operating company, a canoe connection fee charged Ugshs 2,000 to 5,000 per person then.

However, Prime Safaris notes then that the floating mass twice blocked the Port Bell at Luzira presenting a big threat to the ships that have been coming in from Mwanza in Tanzania and Kisumu in Kenya. However, this was relieved when the block moved for close to two Kilometers inside the lake towards the Miami Beach (near Port Bell) before being blown by strong winds that took it from the mainland thus clearing it in one night – a surprising encounter to happen.

In an opinion piece in *The Daily Monitor* (June 2016), Dr Lugumira (Gulu University) noted that, 'Lake Victoria is a pretty old freshwater body, whose main hydrologic input is rain that falls on this vast water body. Over the years, swamps have colonized its shoreline to create a thick mat of intertwining roots within an organic soil matrix that thins towards the upland. But the lake's water level dramatically fell after the drought that gripped the region, at a time another dam (Kiira Power Station) was constructed across the only outlet of the Lake'. Dr Lugumira added that the result of this disturbance exposed the hitherto inundated land, resulting in sediment desiccation, acceleration of decomposition in places, and colonization of locales by opportunistic upland plants. The relatively dry environment also attracted cultivation and human occupation of originally very wet areas. Seasonal water level surges, especially during wet seasons, occasionally find land with failures that allow it to give way after bouts of wave and wind encounters. He added that while the potential for tourism have been made, the extent to which floating islands interrupt livelihoods on Lake Victoria's shores remains unknown.

But on April 14, 2020, a huge floating island in Lake Victoria triggered a nationwide blackout after clogging a turbine and affecting the normal operations at the 380 MW Nalubaale – Kiira generation complex, and the 250 MW Bujagaali Hydro plant. This caused a broadcast by President Yoweri Museveni on the Covid-19 crisis to be delayed by an hour. According to the Uganda Electricity Regulation Authority (April 15, 2020), the restoration involved support from the Kenya Power system.

According to a statement released by the hydro electricity generation company - Eskom Uganda Limited, 'The presence of this island at the dam reservoir created extensive debris and waste material that blocked the water intake screens through which water for power generation is transported'. The statement went on to add, 'In addition, it also caused the blockage of the cooling pipe systems that draw water from the dam reservoir for purposes of cooling the generator machinery'. Fortunately, on April 22, 2020 Eskom Uganda's Chief - Thozama Gangi tweeted that works to remove the floating islands at Nalubaale and Kiira HPS had been completed successfully. According to NEMA Uganda, the floating masses are also a threat to cage fish farms. While timely efforts to clear the floating islands by Eskom Uganda Ltd and the relevant institutions are commendable, this incidence with nation-wide effects sounds a need to reflect on this challenge by: rapid deployment of decentralized renewable energy systems at major installations / cities to supplement and or back-up any hydropower failures; urgent enforcement of policies and laws on conservation of catchments areas like wetlands; scaling up implementation of the Water Hyacinth Surveillance, Monitoring and Control Strategy (2012 - 2030).

JEEP Stoves to Counter Energy Inefficiency and Indoor Pollution in Nakasongola



Compared: The Three-stone (L) and the Institutional energy saving stove (R) at Blessed Harvest Day and Boarding Primary school. Photos: JEEP

As part of the East African Civil Society for Sustainable Energy & Climate Action (EASE-CA) Project (2019 - 2022), Joint Energy and Environment Projects (JEEP) has provided Blessed Harvest Day and Boarding Primary school in Nakasongola with an institutional Energy saving stove which will replace the traditional three - stone stove that consumes tremendous amounts of firewood, causing significant CO₂ emissions, as well as creating health issues for the people working in the kitchens.

According to the Uganda National Alliance for Clean Cooking (UNACC) in 2012 only about 7% of the population was using clean and efficient cooking stoves. Institutions in Uganda, like schools, health centers, prisons, commercial buildings and restaurants primarily rely on traditional cooking technologies, such as three stone stoves, open fires etc. 96% of schools use wood as their main cooking fuel, which contributes to deforestation and environmental degradation. Indeed, the major environmental problems and challenges in Nakasongola District are soil exhaustion, lack of soil conservation practices, over grazing, Bush fires, deforestation, poor environmental health, low safe water coverage, inadequate environmental awareness, wetland degradation, lake exhaustion and inadequate institutional capacity in environmental management.

Blessed Harvest Day and Boarding Primary school is located in Nakasongola Town council (Nakasongola district). It was founded in 2007 by Ms. Harriet Batukema. The school has both Nursery and primary sections i.e. from baby class to Primary Seven with a population of 459 pupils. Due to scarcity, the demand for fire wood is very high in the Nakasongola. Those dealing in this business normally now sell wet wood with the preferred tree species being mango and acacia.

With the Institutional energy saving stove, Ms. Harriet Batukema projects that that this term (period of about 3 months), the school is likely to use 3 trucks firewood from the 8 that have been used previously. In money terms, Ms. Harriet Batukema adds, ‘At the end of the term we will be saving seven hundred fifty thousand Uganda shillings and at the end of the year this will translate to two millions two hundred fifty thousand shillings. On the use of these savings, Ms. Harriet Bakutema points out their intention to accumulate these savings on a deposit account, for later use (contribution) to construct a dormitory for learners, as this has been their long-standing dream. To secure sustainable use of the stove, JEEP conducted training for both the teaching staff and cooks after it was constructed. This is intended to cause a behavioral shift from the three-stove towards using cleaner energy, as well as wider awareness about climate change implications of this local level action. JEEP followed up this training to secure optimal use of the institutional stove.

The institutional stove was to be formally commissioned on 22nd March 2020. This changed because of the sudden closure of all schools in Uganda due to the Covid-19 pandemic. The event was planned to involve school authorities, learners and the general public. Through the EASE-CA project, International Network for Sustainable Energy, Uganda Coalition for Sustainable Development, Nordic Folkecenter for Renewable Energy, Tanzania Traditional Energy Development Organisation and Sustainable Environment Development Watch Kenya seek to increase access to sustainable energy and other climate solutions to local communities in Uganda, Kenya and Tanzania with both women’s and men’s full and effective participation and leadership for improved livelihoods and reduction of poverty. **Read more about progress in implementation of the EASE-CA Project from: <http://inforse.org/africa/EASE.htm>**