Exploring Green Growth for Uganda's Development

Opportunities Post COVID-19

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The Center of Faith, Family and Justice (CFFJ) is a Ugandan Christian Think Tank founded in 2021 to contribute to evidence-based policy, advocacy, and decision making. Our main focus is to investigate how the social, political and economic conditions of life affect faith, family and justice. We aspire to connect policymakers and citizens; and to build transformed, resilient, and integrated communities.
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Executive Summary

Uganda has lost over 3 million hectares of forest land since the 1990s. Human settlement, the need for arable land for agriculture, and the need for fuel are the main reasons for forest destruction. Wood fuel is still Uganda's predominant source of cooking energy. Transitioning Uganda's energy consumption behaviour will require several interventions, pivotal of which is providing cheaper clean energy sources for cooking. Such transitions would not only be beneficial to the environment, but they have the potential to be of economic benefit to individuals, communities investors, and the nation as a whole.

It is vital that the Government, civil organizations and relevant stakeholders invest in Research and Development of potential clean energy sources. These could alleviate the need to consume wood fuel and charcoal. Uganda also needs aggressive reforestation drives to reclaim and replace the lost forest cover.

Green growth opportunities are worth investing in because they have the potential to transform Ugandan communities through creating: a cleaner environment, healthier living conditions, more employment, economic growth, and development, which would lead to healthy and resilient families and communities.

Introduction

Uganda entered her third phase of implementing the National Development Plan (NDP III) in July 2020.
This plan is part of a six-part series of plans that aim to realize Uganda's development. The NDP III came out at a time when Uganda is reeling from the effects of the COVID-19 lockdown.

As it has been tagged by the World Economic Forum (WEF), the Great Lockdown was meant to curb the spread of COVID-19. However, it caused upheavals in the world's economies- job losses, business closures, tremendous losses in human life, among others. It is only now that countries are getting back on their feet.

The COVID-19 economic disruption has been perceived by many to be a springboard from which much good can come.
The World Economic Forum (WEF) is encouraging countries to build back better and stronger after the COVID-19 crisis, tackling inequality and climate issues through implementing green growth strategies is at the top of the recovery agenda. Green recovery is at the forefront of strategies the G20 countries plan on using to shape their economic recovery from the COVID-19 pandemic setback.

While most countries around the world will probably suffer negative economic growth for the year 2020, a few countries have strategized on ways to ensure that this crisis is not put to waste.
Green growth, according to the WEF (2020) , involves five strategies: Investing in better building more weather resilient structures; Better access to healthy food to curb food insecurity and obesity; Smart mobility-cutting back on vehicle use; Greening our neighbourhoods and cities; and, building more resilient infrastructure.

Green recovery is vital to Uganda because it saves our environment through reforestation, protecting the wetlands in Uganda, and protecting wildlife. It also enables us to enjoy a cleaner and healthier environment while creating much needed gainful employment opportunities.

Uganda, however, is grappling more problems in addition to climate-related challenges. Her economy still has great strides to take in growth. Several other issues are still high on the development agenda and need to be tackled to achieve wholesome economic development. Matters like poverty, income inequality, infrastructure development, unemployment, good quality education and industrial development need to be addressed and resolved.

The past two NDPs have made strides in addressing these issues, but much more still needs to be done. This paper focuses on how green growth strategies may be used to significantly contribute to Uganda's economic development by hitting several birds with the green growth stone.

Green Growth for Uganda

WEF and NDP III inspire the Green Growth strategies we explore in this brief. In addition to contributing towards climate recovery, green growth strategies are expected to create gainful employment opportunities as they are labour-intensive initiatives. Creating jobs is paramount if Uganda is to expand its tax base and improve the country's overall income capacity. Increased income, in turn, improves the standards of living in any community.
Curbing food insecurity and obesity: The obesity rate in Uganda was at 5.3% as of 2016 (CIA, 2020). These are adults with a Body Mass Index of 30 and above. Obesity is not yet a dire challenge in Uganda's health system because the majority of people ingest more fresh food than they do junk foods.

A study conducted among young adults revealed that slightly over 10% of the young adults in Uganda are obese with females at higher risk of obesity than males because of lifestyle differences (Baalwa et al. 2010).
Food insecurity, though, is still a problem. Occasional droughts and famines greatly affect thousands of people in Uganda who are subsistence farmers. These also negatively affect the crop yields, rendering framers vulnerable due to losses in potential earnings.
The use of modern farming techniques is vital to increase farming efficiency, reduce vulnerability to changing weather patterns, and increase farming yields.

Clean energy use: Energy sources in Uganda include: biomass consumption—burning firewood and charcoal; electricity; and oil which is mainly used in vehicle fuel. The firewood consumption at 78.6% represents the highest energy source (Energypedia, 2019).

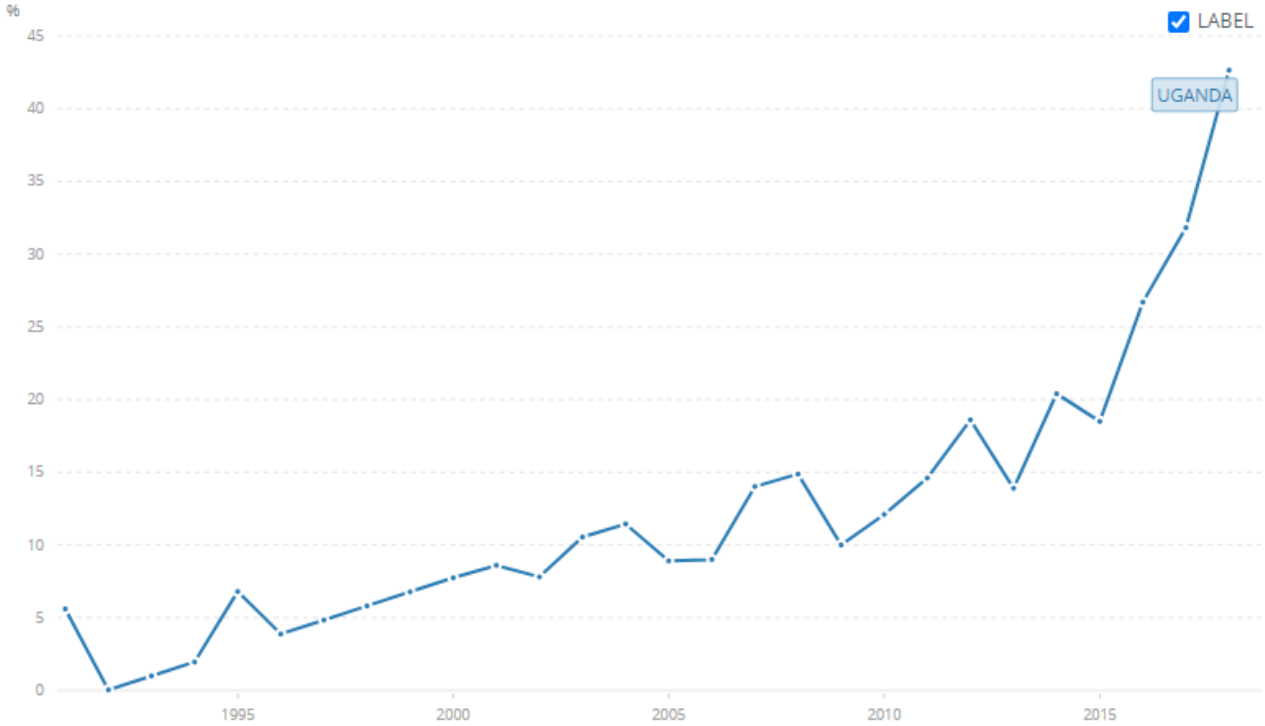
This points to the challenge Uganda's environment is facing- rampant deforestation- a problem in need of reversal.

Compared to the world's average energy consumption per capita of 21,027kWh as of 2019, Uganda's per capita energy consumption as of 2016 was 716kWh (Our World in Data, 2019). As of 2017, 6.9 million homes were not connected to electricity(USAID, 2020), and only 42.65% of Ugandans enjoyed electricity coverage (World Bank, 2018).

Although this is a significant improvement, Uganda's electricity coverage is still one of the lowest in the region and the world. The growth trend of electricity coverage in Uganda is shown in Figure 1 below.

Regarding energy imports and exports, Uganda's main energy imports are petroleum products.

Figure 1: Electricity Coverage in Uganda

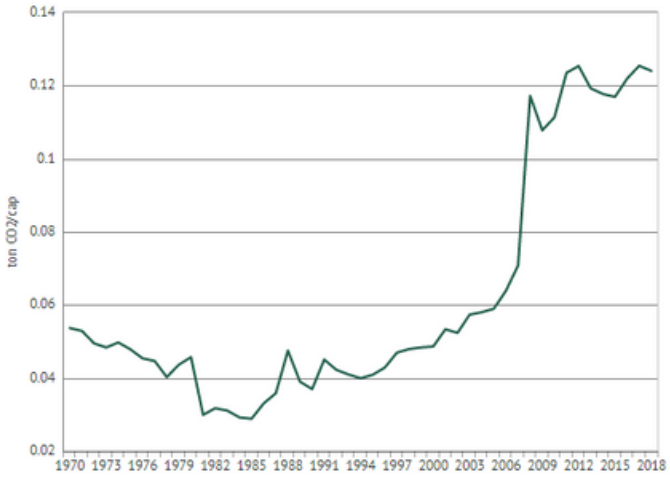


Source: World Bank Data, 2020

In Uganda, almost all vehicles are fuelled by diesel and gasoline; it was only in 2020 that two electric buses were locally assembled and put to use. Moving towards smart mobility would significantly advance this cause of transitioning to clean energy. Uganda also exports hydro-electricity to Kenya, Tanzania and parts of eastern DR Congo (Daily Monitor, 2020).

Smart mobility: Recently, two electric buses were assembled and are now being used in Uganda (Kiira Motors, 2020). Transitioning to clean energy transport requires a reduction in the use of petroleum-fuelled motor-vehicles. Electric buses, cars, and trains would ideally replace these carbon-emitting modes of transport. In Uganda, carbon emissions come mainly from agricultural use, and then land-use change and forestry (USAID 2012).

Figure 2: Uganda's annual CO2 emissions



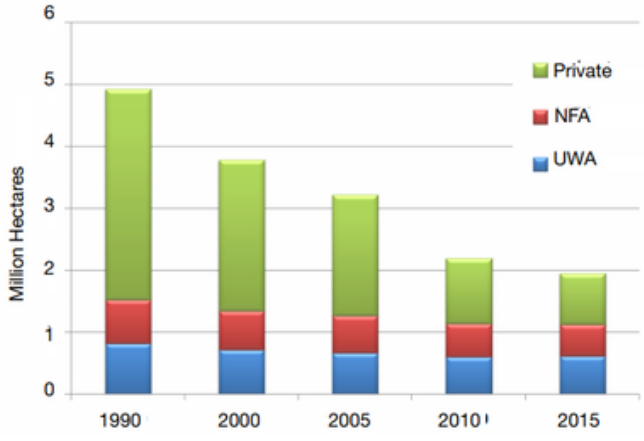
Source: World Data Atlas, 2018

Greening the country: NDP III is taking on a programmatic approach to achieve its goals in the next 5 years. Among the eighteen programs laid out by the NDP III, one program is set to tackle climate change, natural resource protection, environmental protection and water management (NPA 2020).

Uganda has a forest restoration plan aiming to reforest 8,079,622.1 hectares of land over the next decade(MINIRENA 2016). This target would accomplish a 24% forest coverage of Uganda's land. Uganda's forest coverage is currently at 9%, a steep decline caused by rampant deforestation over the past few decades. Private landowners, Uganda Wildlife Authority (UWA), and the National Forestry Authority (NFA) are the predominant forest landowners in Uganda. We see that it is private users responsible for the declining forest coverage in Uganda.

The main causes of deforestation include clearing land for agricultural purposes and settlement purposes. Also, firewood is the primary source of energy in most households in Uganda, supplying 78.6% of the energy demanded (Energypedia, 2019). This shows the public consumption of trees, a dire situation. The Figure 3. below shows how many millions of hectares have been lost to deforestation over the past three decades. Most of these have been on privately owned land. Trees are usually cleared to create space for settlement and agriculture, and also for firewood and timber.

Figure 3: Forest cover change by management regime



Source: Uganda Forestry Restoration Plan Assessment Report, 2016

Much must be done to mitigate this problem that has led to climate change in Uganda. Frequent droughts and famines and very heavy rains have recently become part of Uganda's weather patterns.
National Forestry Authority has aggressive tree planting plans in place. These and more must be done to reverse the trend of deforestation. Transitions must be made to clean energy use for cooking if we want to reduce wood-fuel consumption.

Waste collection and disposal: Great strides have been made in this area. But the rampant littering in some communities leaves little to be admired. The municipal councils are responsible for ensuring that communities are well cleaned up by effective garbage collection and disposal mechanisms. This is vital for sanitary living conditions.

Policy Recommendations

Invest in Research and Development of solar-powered solutions.
Commendable effort should be invested in Research and Development (R&D) to explore clean energy source alternatives, preferably locally made to provide local clean energy solutions.
Developing cheaper solar-powered cooking devices to cut down the use of firewood for cooking would reduce the demand for charcoal and free up the much needed time for girls and women to pursue education and engage in more productive work. Several technologies that can be harnessed for this purpose already exist in some countries (Chino, 2013).
Solar-powered electric vehicles are also still under R&D. Kiira Motors Cooperation, a state-owned enterprise aims to develop zero-emission vehicles.

Such initiatives are greatly beneficial because they solve the problems and provide opportunities in the form of: gainful employment, an increased tax base, earnings from sales within the country, and earnings from export sales hence spurring economic growth. This initiative and more are needed to provide local solutions to local problems.

Training farmers on smart farming techniques.
Making modern farming technologies well known and easily accessible would help farmers upgrade their farming experiences. They would be able to produce more food on less land, increasing efficiency. Better farming practices would increase farmers' resilience to weather crises, reducing the chances of suffering crop failures. Such changes would increase farmers' earnings from sales within the country and exports, attract employment in the farming sector, and reduce food insecurity in the country.

Engage in aggressive reforestation drives.
Involve as many stakeholders as possible in tree-planting drives. The public and private investors should be brought on board to provide the synergistic effort required to increase Uganda's tree count.
This initiative would provide gainful employment and improve Uganda's climate. It would also increase Uganda's chances of becoming carbon neutral or even carbon negative.

Conclusion

Green growth opportunities are worth investing in because they have the potential to transform our communities through creating: a cleaner environment, healthier living, more employment, economic growth, and development, which would lead to healthy and resilient families and communities.

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In-set Photo: Uganda Tourism Board

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