

August 2022; Issue 8

DARKNESS AMIDST ELECTRICITY ACCESS: ASSESSING HOUSEHOLDS' EXPERIENCES WITH GRID POWER



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A community member near electricity distribution infrastructure in Hoima district. Despite being connected to the grid, communities continue to grapple with electricity challenges

In this newsletter:

- Grid power: Assessing households' experiences and limitations
- Pictorial of our activities
- Lobbying
- In the media
- Upcoming events



Dear reader, welcome to our August 2022 newsletter. This month, our newsletter focuses on a matter that touches us all: that of the fragility of Uganda's electricity sector. Electricity access, affordability and reliability is a pre-requisite for socio-economic transformation.

This month however, many of us have watched in shock as the challenges of Isimba hydropower dam have played out. On August 8, 2022, the dam was shut down.

Reports indicated that the dam flooded following an engineer from Uganda Electricity Generation Co. Ltd (UEGCL) opening the wrong gates. This necessitated shutting down of the dam to protect equipment and lives. The country faced loadshedding thereafter, which affected businesses.

This wasn't the only bad news. Scrutiny into the dam revealed that construction of the dam was supervised by unlicensed engineers. The dam, which was commissioned in March 2019, also has ten high-risk defects that require to be urgently remedied. Experts from China are supposed to be flown into the country to save the dam.

The crisis around Isimba dam is not only unfortunate but displays the mismanagement of Uganda's electricity sector. This mismanagement affects all Ugandans, especially the most vulnerable communities.

The above is perhaps demonstrated by the fact that for over a decade now, the Ugandan government has prioritised investment into the electricity sector. Several programmes such as Rural

Electrification ones, policies such as the 'Free' Electricity Connections Policy, and projects including the development of mini-grids have been implemented to increase electricity access.

Trillions of shillings have been invested in the electricity sector. However, electricity (grid) access remains low at **19%**. Power prices also remain high and electricity supply is unreliable. Poor communities face the brunt of these challenges as they cannot afford power. Policy, programme and governance changes must be made if the electricity sector is to deliver accessible, affordable and reliable power to drive socio-economic transformation.

In our **Word from CEO and Partners**, we demonstrate the above by using the case study of a community in the Kyakaboga oil refinery resettlement in Hoima district.

The Ministry of Energy connected the community to power in 2020 with the view of improving the socio-economic conditions of the community.

However, research that we conducted this month shows that the socio-economic benefits enjoyed by the community are few yet government spent huge amounts of money on the electricity project. The Kyakaboga oil refinery community is a representation of several out there.

While communities must be supported to access power, investment of taxpayers and development partners' money in projects with little to no return is unfeasible.

We therefore make recommendations to enhance electrification efforts while ensuring accessible, reliable and

affordable power supply for all.

Away from the above, in this newsletter, we bring you our **pictorial** through which we share the activities that we and our partners implemented this month.

For instance, with our partners from the Democratic Republic of Congo (DRC), we organised a cross-border webinar to strengthen Ugandan and Congolese civil society groups to work together to promote clean energy while stopping the expansion of fossil fuels.

In addition, we supported our partners from Uganda and the DRC to engage oil host communities and government on the need to promote a clean energy transition.

Furthermore, we organised an exchange learning between communities in Hoima and Kikuube districts to promote forest conservation amidst oil activities in Uganda's Albertine Graben.

AFIEGO and our Inclusive Green Economy Network East Africa (IGEN-EA) partners also trained women beekeepers in Hoima district to improve their livelihoods and promote environmental conservation.

Further, with our IGEN-EA partners, we organised a radio talkshow to sensitise communities in over seven districts in the Bunyoro sub-region on how to engage in successful beekeeping to enhance livelihoods and environmental conservation.

In addition, with our IGEN-EA partners, we shared research findings on the tourism potential of Bugoma forest via a radio talkshow that reached stakeholders in over seven districts in the Albertine Graben.

We did so much more as can be seen in our pictorial.

In our **lobbying** section, we share some of the lobby and advocacy products that we disseminated this month including a letter to the Ministry of Lands to urgently present the Land Acquisition Bill, 2018 before parliament for debate and enactment.

We also bring you a press statement that we issued through which we called on government to stop loadshedding after the temporary shutdown of Isimba hydropower dam.

We also wrote an open letter to the president calling on him to address electricity sector challenges to promote a clean energy transition.

Finally, in the **media** section, we bring you some of the newspaper articles written by our staff and partners that were published by the media this month.

We hope that you will enjoy the newsletter.

Editorial team:

Diana Nabiruma

Patrick Edema

Balach Bakundane

GRID POWER: ASSESSING HOUSEHOLDS' EXPERIENCES AND LIMITATIONS

Dear reader, allow us to share some brief history with you. In the early 2000s, Uganda experienced an electricity crisis. The country grappled with too little power for its population and economic needs. Citizens experienced loadshedding as power was rationed to meet competing demands.

To address the above challenge, government focused on constructing several hydropower dams. Power stations such as Bujagali, Isimba, Nyagak, Kabalega and others were constructed. To date, Uganda has over **27** hydropower dams.

Those that are under construction, including Karuma, Achwa I as well as Nyamagasani I and II, are four. Those that are proposed for construction are eight.

Construction of dams was not the only initiative that government undertook to increase electricity access. Since Uganda started putting in place national development plans in 2010, emphasis has been placed on electricity generation and transmission.

Trillions of shillings, some contributed by development partners under various initiatives, have been spent on constructing hydropower dams as previously indicated, putting in place electricity transmission infrastructure and even connecting households to power under policies such as the 'Free' Electricity Connections Policy.

Despite the above, electricity access in Uganda remains low with grid access standing at only 19%. Even where access exists, citizens find it hard to use power. What causes this challenge?

RESEARCH

In August 2022, AFIEGO conducted research to understand how rural communities

use grid power. Our study focused on 46 households in the Kyakaboga-Hoima oil refinery resettlement. The scope of our study was limited but our findings corroborate those of earlier research on rural communities' electricity access, expenditure, use and limitations.

The Kyakaboga-Hoima community that we studied is composed of households whose land was acquired by government for the oil refinery project. The community was resettled in 2018 by government in Kyakaboga-Hoima. As part of government's commitment to provide electricity to the households, the Ministry of Energy and Mineral Development (MEMD) connected the community to grid power in 2020.

METHODOLOGY

Our study employed a cross-sectional research design and a mixed-methods research approach. Both quantitative and qualitative data collection methods were employed. Data was collected from 38 households through interviews and questionnaires.

While the study sought to collect data from all the 46 households in the resettlement, 38 households returned the questionnaires that were sent to them.

This was an 82.61% response rate. The data that we collected was analysed using the following procedure: Qualitative data was transcribed verbatim, word processed, printed, and read. The quantitative and qualitative data was analysed using quantitative and qualitative tools respectively.

FINDINGS AND ANALYSIS

The following were the findings of the study.

Demographic characteristics

The majority of the respondents were adults

aged 35-59. This age group constituted 39.47% of the respondents. The group was followed by youths aged 18-30 years at 31.57%. The elderly respondents aged 60 years and above stood at 28.89%. In terms of gender, 55.26% of the respondents were male while 44.74% were female.

Expenditure on electricity

The study assessed the amount of money households spend on electricity on a monthly basis. The study found that the majority of the respondents, 78.36%, spend UGX 10,000 per month on power. 15.34% spend UGX. 12,000 while only 3.66% and 2.64% spend UGX 20,000 and UGX 40,000 per month respectively. The households that spend more on electricity are those that are headed by males.

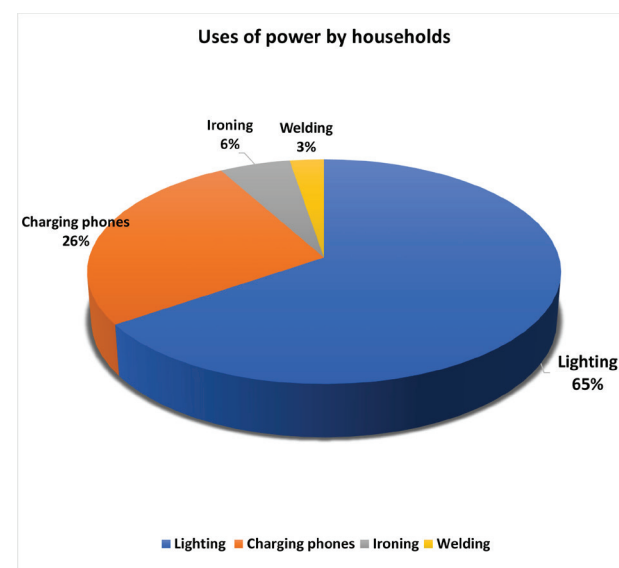
The above findings are in line with those from previous surveys say the **Uganda Rural-Urban Electrification Survey** of 2012 by the Uganda Bureau of Statistics (UBOS). According to UBOS, "... on average, each household spends UGX 13,600 at the national level on electricity. ... urban households spent more on electricity compared to their rural households who spent only UGX 10,000 ".

Uses of power

This study assessed how the Kyakaboga-Hoima households use grid power. Of the respondents who participated in the study, the majority, 65%, said that they use power for lighting. 26% said that they use it for phone charging, 6% said that they use it for ironing and 3% said that they use power for welding.

This means that the majority of the households are using power for consumptive and not productive purposes. The **productive use of power** is defined as the use of energy services to produce "agricultural, commercial and industrial" goods and services. Using power to run millet or maize milling machines is an example of the productive use of power.

In terms of productive use of energy, the few households that were using power for productive purposes in Kyakaboga, namely welding, were male youths. Women reported using power for domestic purposes such as lighting and ironing. Below is a piechart showing what households use power for.



Costs

The study assessed the challenges experienced by households connected to grid power. The high cost of power was one of the most cited challenges. The respondents reported that a unit of electricity costs them UGX 900. This means that the majority purchase 11.1kwh (units) of electricity per month. This is below the **national median household** average of 39.6kwh per month.

One of the research respondents said the following in relation to power prices: "The charges are expensive and my electricity always has challenges."

Another said, "This power is not beneficial because the service fee [price] is too expensive to us. [The] power is also on and off which is not good [for a] business man or woman".

The high cost of power is one of the factors prohibiting the productive use of power in Kyakaboga.

Other challenges

The challenges faced by grid power users in Kyakaboga that this study found included: unreliable power supply. All the respondents said that they suffer power outages every month. 56.28% said that they suffer outages at least two to four (2-4) days in a month. 28.72% and 20% reported that outages occur for seven and five days in a month.

One research respondent said: "Whenever the weather is bad or when it has just rained, the electricity just goes off."

Other challenges included the following: technical challenges, failure to get tokens after paying for Yaka! electricity and others.

Alternatives

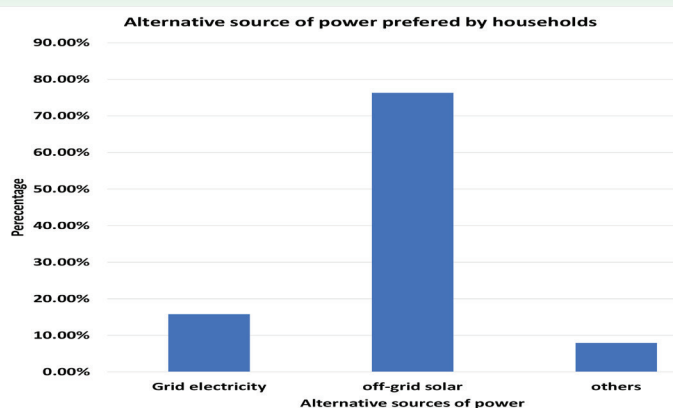
This study also assessed the alternative sources that are preferred by households. The study found that the majority of the households, 76.32%, preferred off-grid solar. They said that off-grid solar is cheaper and more reliable than grid electricity.

The study also found that 15.79% of the respondents preferred to continue using grid electricity while only 7.98% of the respondents preferred other alternatives.

"Grid electricity gives bright light for my children while reading their books," one respondent said.

Although the majority of respondents who participated in the study preferred off-grid solar, they were aware of the uses of grid power in the education and health sectors which included powering x-rays for scanning, powering machines for oxygen, and lighting.

Below is a chart showing the preferred clean energy alternatives.



CONCLUSION

The experiences and challenges of the Kyakaboga-Hoima community as regards the electricity sector are not unique. Failure by citizens to use power to meet all their needs even where access exists is a well-documented challenge.

Indeed, government says that Uganda produces excess power that citizens have failed to consume. Yet the country's installed generation capacity stands at only **1346.7mw**.

To boost electricity access and utilisation, it is paramount that government addresses major electricity sector challenges that undermine citizens' demand for power. Key among these challenges are policy gaps that have failed to ensure that Uganda has a coherent and foolproof electrification strategy that ensures that citizens access and use power options that are most suitable for them. The development of many dams for instance won't solve power access and utilisation challenges.

Others include corruption which sees government signing expensive electricity sector agreements which makes power unaffordable, poor planning and failure to ensure public awareness about the need to use power for productive purposes among others.

By CEO and Partners

AFIEGO EMPOWERS OIL HOST COMMUNITIES TO PROMOTE ENVIRONMENTAL CONSERVATION



On August 12, 2022, AFIEGO organised an exchange learning between communities in Hoima and Kikuube district.

The communities discussed the livelihood options they can pursue to promote forest conservation amidst oil exploitation in the Albertine Graben.

AFIEGO SUPPORTS DRC CSOS TO ENGAGE THEIR GOVERNMENT FOR CLEAN ENERGY

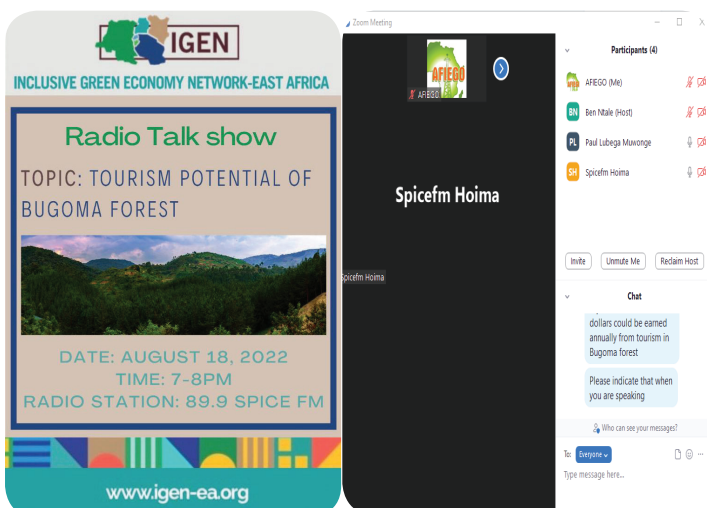


In August 2022, AFIEGO supported its partners from the DRC to engage their government on the need to promote clean energy.

The partners used Uganda's oil exploitation experience to make a case for clean energy development instead of oil exploitation in the DRC.

AFIEGO and our Congolese partners also organised an exchange learning webinar to support the promotion of clean energy over fossil fuels.

AFIEGO AND PARTNERS DISCUSS TOURISM POTENTIAL OF BUGOMA FOREST



On August 16, 2022, AFIEGO and our partners organised a radio talkshow at Spice FM in Hoima.

During the talkshow, the tourism potential of Bugoma forest was discussed.

The talkshow was aimed at contributing to efforts to protect Bugoma forest from oil and sugarcane challenges.

AFIEGO AND PARTNERS TRAIN WOMEN BEEKEEPERS IN HOIMA DISTRICT



On August 12, 2022 AFIEGO joined our IGEN-EA partners to train women beekeepers in Hoima district.

The training equipped the women beekeepers with knowledge and skills to improve their productivity.

This will improve their livelihoods as well as conserve the environment.

AFIEGO also held a radio talkshow to sensitise communities to promote beekeeping, a green economic activity.

AFIEGO AND PARTNERS HOLD PLANNING AND REFLECTION MEETING



On August 19, 2022, AFIEGO and our IGEN-EA partners organised a planning and reflection meeting.

This meeting attracted a total of 26 participants including new members who were inducted into the network.

During the meeting, the network members were able to reflect on their milestones, achievements and plan for 2023.

In August 2022, AFIEGO and our partners wrote a letter to the President on the need to address the obstacles limiting Uganda's clean energy transition efforts.

In addition, we issued a press statement calling on government to stop loadshedding after the Isimba hydropower dam was temporarily shut down.

Furthermore, AFIEGO wrote a letter to Ministry of Lands to urgently present the Land Acquisition Bill, 2018 to parliament for debate and enactment.

AFRICA INSTITUTE FOR ENERGY GOVERNANCE

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11th/August/2022

H.E. Yoweri Kaguta Museveni,
The President,
Republic of Uganda,
Kampala (U).

Your Excellency,

OPEN LETTER TO THE UGANDAN PRESIDENT TO ADDRESS OBSTACLES TO CLEAN ENERGY TRANSITION

Greetings from the undersigned Ugandan clean energy, environmental and human rights civil society groups. We take this opportunity to thank you for your recent advice to the country that the best way to solve high fuel prices is not to invest in more petroleum products/fossil fuels but rather to invest in efforts to enable our country to transit to electric cars and other clean energy options. We appreciate that you and your government are now supporting efforts to move away from fossil fuels which remain one of the biggest dangers to the country.

The main objective of this letter is to highlight some of the obstacles to the clean energy transition and make recommendations for action to achieve the transition in line with the national address you made on July 27, 2022.

Obstacles to clean energy transition

a). Oil investments: Your Excellency, over USD15 billion is planned to be invested in the East African Crude Oil Pipeline (EACOP), Tilenga, Kingfisher, and other oil projects. Some of this money will be borrowed from banks by the Ugandan government and the oil companies operating in the country. The money borrowed by the Ugandan government stands to increase Uganda's public debt, undermining the country's capacity to fund clean energy options. It should be noted that by December 2021, Uganda's [national debt](#) stood at over USD19 billion (over UGX73.7 trillion). If government goes ahead with the above oil projects, in the next five years, Uganda's total debt will increase. Government estimates that in this financial year, the country's debt to GDP ratio will hit [52.9%](#) as funds are borrowed for investment in the oil, gas and infrastructure sectors among others. Uganda's huge debt will not allow any real socio-economic transformation for a clean energy transition.

b). Ecosystem destruction: Further, Your Excellency, when commercial oil deposits were discovered in the Albertine Graben in 2006, protected resources such as lakes, rivers, wetlands,

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August 17, 2022

FOR IMMEDIATE RELEASE
KAMPALA

GOVERNMENT SHOULD STOP THE ONGOING LOADSHEDDING

Africa Institute for Energy Governance (AFIEGO) and our civil society partners that work on promoting accessible, reliable and affordable clean energy services in Uganda are calling on the Ugandan government to stop the ongoing loadshedding.

Government must work with the Independent Power Producers (IPPs) that Ugandans have paid Shs. 1.4 trillion over the last 16 years for deemed (unconsumed) power to ensure that the ongoing loadshedding ends. These companies must fill the electricity supply gap left by the shutdown of Isimba dam.

The loadshedding, which has affected the Kampala metropolitan area and parts of eastern Uganda, started following the temporary shutdown of Isimba hydropower dam.

[Reports](#) indicate that the dam was shut down following a "human error" in which an engineer from Uganda Electricity Generation Co. Ltd (UEGCL) opened the radial outflow instead of inflow gates at the dam, leading to flooding of key equipment. Shs. 5 billion is needed to rectify the error.

Following the Isimba dam shutdown, UMEME, which distributes over 90% of Uganda's electricity, [warned](#) Ugandans to brace for power blackouts. In an August 16, 2022 [press release](#), the Ministry of Energy indicated that the loadshedding would go on for three weeks. Traders are counting losses because of the loadshedding.

Mr. Dickens Kamugisha, the CEO of AFIEGO, says, "It is absurd that the shutdown of Isimba dam has occasioned loadshedding. The president has been boasting that Uganda has excess power. Why hasn't this power been deployed to avoid loadshedding?"

He adds, "The truth is that the electricity sector is greatly mismanaged. The Electricity Regulatory Authority has been issuing electricity generation licenses to companies without ensuring that transmission infrastructure is in place, leading to production of the so-called excess or deemed electricity."

It is notable that for the past 16 years, Ugandans have paid over 13 power companies for deemed energy. However, the Ministry of Energy plans on adding only 70MW to the grid from two plants, the Namanve Thermal and Kakira Sugar power plants. These are expected to partly address the gap left by Isimba. Another 60MW is going to be imported from Kenya.

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The Minister of Lands, Housing and Urban Development,
P.O. Box 7096,
Kampala (U).

Dear Hon. Minister,

RE: LETTER TO THE MINISTER OF LANDS TO URGENTLY PRESENT THE LAND ACQUISITION BILL, 2018 TO PARLIAMENT

Greetings from Africa Institute for Energy Governance (AFIEGO) and our other undersigned environmental and human rights civil society partners as well representatives of oil-affected communities.

AFIEGO and our undersigned partners have worked with communities whose land is compulsorily acquired for oil projects for over a decade. We have documented the challenges that these communities suffer due to grievous gaps in Uganda's land acquisition laws.

Because of this, we take this opportunity to appreciate the Ministry of Lands for compiling the draft Land Acquisition Bill, 2018. The bill seeks to repeal the 1965 Land Acquisition Act which has unconstitutional provisions and several gaps that have undermined the protection of communities' land rights during compulsory land acquisition processes.

We believe that the draft Land Acquisition Bill, 2018 has the potential to promote citizens' enjoyment of land and other property rights as provided for under Article 26 of the 1995 Ugandan Constitution.

However, we note with concern that since 2018, the Ministry of Lands has not tabled the above bill to parliament for debate and enactment into a law.

It should be noted that on March 30, 2020, the undersigned civil society groups reviewed the draft Land Acquisition Bill, 2018. The review was based on discussions with over 58,000 oil-affected people from 34 oil host communities in 13 districts. Following the discussions, we compiled a memorandum of proposals on gaps and weaknesses in the bill. We made recommendations to improve the draft bill.

Unfortunately, to date, no steps have been taken by the Ministry of Lands and government at large to complete the bill and table it before parliament for debate and enactment into law.



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VPN
VIEWS PEOPLE & NEWS
SATURDAY, AUGUST 20 | 9AM - 11AM
WITH RITA KEMIGISA



TOPICS:

- 1- IMPACT OF KENYA'S POST ELECTION EVENTS ON EAC.
- 2- ISIMBA DAM SHUTDOWN: IS UGANDA RUNNING INTO AN ENERGY CRISIS?

Guests:



HON. AUGUSTINE RUZINDANA
Veteran Politician/ Former IGG



DICKENS KAMUGISHA
Executive Director, Africa Institute for Energy Governance.



ENG. IRENE PAULINE BATEBE
PS - Ministry of Energy and Mineral Development

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This month, AFIEGO staff, research associates and youth champions wrote over 15 newspaper articles that were published in the leading newspapers. The media also published articles from the media interviews we held this month. Some of the published articles are captured below.

LETTER OF THE DAY

The purpose of the Parish Development Model (PDM) is to deepen the decentralisation process, improve household incomes, enable inclusive, sustainable, balanced and equitable socio-economic transformation, and increase accountability at local levels.

This implies eradication of poverty and vulnerability as well as total transformation of the subsistence households into the money economy. It is everybody's concern to see that the rural communities generate sustainable incomes as soon as possible. Of the various livestock enterprises, poultry, dairy, pig, and goat rearing, among others, beekeeping enterprise offers one of the best options for the rural communities and commercial farmers because of its minimal requirements for land, machinery and equipment, labour and capital investment.

The revenue potential for beekeeping is estimated at \$10,400 per year with the project cost of \$7,345 and a profit margin of 73 percent, hence proving to be a viable project.

In Uganda, honey production potential is enormous, estimated at 500,000 metric tonnes per year. This potential is not yet fully exploited. The lack of knowledge and skills needed to exploit the honey production potential are lacking among the technicians and farmers.

Honey bees are social insects that live in colonies of 10,000 to 60,000. A colony consists of a queen (fertile female), a few hundred drone (males) and thousands of workers (sterile females). As a source of food, honey is delicious and rich in energy and vitamins. It can be consumed whole or mixed with other foods as supplement. Bees produce wax and propolis have high nutritional value and are fed to malnourished children. Royal jelly and pollen are consumed for their high protein value and it greatly improves food security.

Beekeeping could be game changer for Parish Model



Honey is used as a carrier in ayurvedic and unani medicines. It acts as a laxative and prevents cold, cough and fever. Bee products such as venom, honey and propolis are used for treatment of many conditions following the antibiotic nature of the products. The conditions include stomach upsets, diarrhoea, vomiting, wounds, burns, measles, toothaches and fungal infections.

Chemically, honey is a viscous water solution of sugar. Its approximate composition in percentage is as follows: Water 13.20, Fructose 40.50, Glucose 2.3, Minerals 0.1, Vitamins (minute quantities) (B1, B2, C).

Bee venom is anti-inflammatory and is used by humans to relieve pain. It is effective in treating the symptoms of rheumatoid arthritis, neuralgia, high blood pressure, high cholesterol and even multiple sclerosis hence high potential for income generation.

Honeybees provide pollination services, thereby playing a vital

role in food production and overall agricultural productivity. More than 75 percent of all the crops in sub-Saharan Africa benefit from pollination.

Bees are considered the most efficient pollinators because they have hairy bodies, which easily pick up pollen grains as they move about in flowers. In a single day one bee may visit several hundred flowers.

Beekeeping is a non-destructive activity that could be employed in the conservation of plant biodiversity in natural ecosystems. Households living adjacent to these areas can support the conservation efforts of these resources by establishing apiaries within or at the boundary of these protected areas. More so, beeswax can be used in making candles, preparation of varnishes and paints, water proofing and waxing of threads. Honey is utilised for making alcoholic drinks, beauty lotions and poison baits for certain insect pests which fetch a lot of money.

To wrap it up, PDM is the last mile strategy for service delivery by government for improving incomes and welfare of all Ugandans at the household level, which should be maximally utilised through encouraging farmers to practice beekeeping.

The African Development Bank and the government of Uganda through the Farm Income Enhancement and Forest Conservation (FIEFCC) Project, under Agriculture Promotion sub-component embarked on a series of interventions, standardisation of the national training document through the National Bee Keeping Training and Extension Manual, which needs to be greatly implemented under the PDM.

Beekeeping will immensely contribute to achievement of Vision 2040 that aims to transform Uganda from a peasant to modern and prosperous country.

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LETTER OF THE DAY

We must opt for electric vehicles

As a country we need to start laying strategies and encouraging citizens to start importing electric vehicles through establishment of public charging stations at major hubs.

The drive to invest in charging stations is enhanced by consumer preferences rapidly inclining towards passenger and commercial electric vehicles (EVs) on the continent, due to rising environmental consciousness.

Electric vehicles are not just a wave of the future, but are here to save lives and climate as we seek to reduce carbon emissions which will generally serve earth justice.

In Uganda the main sources of air pollution include emissions from vehicles, industrial activities, burning of waste and among others. To solve the climate crisis, we need to make the vehicles on our roads as clean as possible. We have to change the way we use energy to avoid the worst impacts of climate change.

The installation of electric charging stations is gaining momentum in Africa as investors look to exploit what will develop into a multimillion-dollar market opportunity driven by a growing demand for e-mobility due to urgent need of alternative energy sources for transport to state off the growing burden of fuel dependency and as demand for electric vehicles on the continent.

South Africa, the most advanced e-mobility market in Africa, had about 1,000 electric vehicles (EVs) by January 2022 which has really set a good precedent for all African countries.

Emissions from vehicles are not only bad for our planet, but our health too. Air pollutants from gasoline- and diesel-powered vehicles cause asthma, bronchitis, cancer, and premature death. Electric vehicles have a smaller carbon footprint than gasoline-



powered cars, no matter where your electricity comes from. The electricity that charges and fuels battery electric and plug-in hybrid vehicles comes from power grids. Due to surplus power generated, there is no doubt Uganda has the capacity to supply ample electric cars charging stations were in operation globally.

The total installed generation capacity stands at 1346.7mw and during peak hours, only 794.6mw is consumed while over 500mw is dumped and Karuma hydro-power dam is yet to be commissioned in June 2023. As a country, we need to utilise deemed power to cut down losses registered in the power sector. Put simply electric vehicles give us cleaner streets making our towns and cities a better place to be for pedestrians and cyclists.

In over a year, just one electric car on the roads can save an average 1.5 million grams of carbon dioxide. What's more, EVs can also help eliminate noise pollution, especially in cities where speeds are generally low.

As they are far quieter than conventional vehicles, driving electric creates a more peaceful environ-

ment for all. Sales of electric vehicles surpassed 2.1 million units globally in 2019, amounting to over 7 million EVs in service. Notably, 47 percent of these EVs are in China. Contrast that with the fact that only about 17,000 electric cars were in operation globally.

On the other hand, credit goes to the government for supporting 1 Motors Corporation to champion the development of the Domestic Automotive Value Chain for job and wealth creation and to commercialise the Kiira Electric Vehicle Project.

However, our government should amp up the availability of EV chargers, committing to a goal of at least one fast charging station every 50km on major highways and offering subsidies to providers to accelerate installations.

The Policy Committee on Environment should set a realistic national goal that all new vehicles sold by 2040 should be zero-emission through setting supporting policies.

Establishment of public charging stations, importation and pro-

duction of electric vehicles will certainly respond to The National Climate Change Act, 2021.

One of the key objectives of the Act is to enable Uganda pursue its voluntary mitigation targets of reducing national greenhouse gas emissions.

Going forward the government should plan to implement a carbon dioxide tax as the country begins to focus on establishing a greener transport system by promoting electric vehicle production and adoption. A tax waiver on all imported electric vehicles will attract a huge market hence an effective measure to boost adoption rates initially.

Uganda being the pearl of Africa should aim at maintaining and protecting the status quo. The country has the capacity to protect the beauty, natural wonders, climate and people while reducing emissions. Finally, EV friendly tax schemes can also be an effective alternative to direct monetary grants when it comes to boosting EV purchases.

Babru Kembabazi
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LETTER OF THE DAY

Why protection of biodiversity is key

Biodiversity is all the different kinds of life you will find in one area—the variety of animals, plants, insects, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web to maintain balance and support life.

Biodiversity is essential for the processes that support all life on earth, including humans. With out a wide range of animals, plants and microorganisms, we cannot have the healthy ecosystems that we rely on to provide us with the air we breathe and the food we eat.

Pollinators such as birds, bees and other insects are estimated to be responsible for a third of the world's crop production.

Biodiversity is at the heart of what drives the tourism industry. Tourist destinations such as tropical forests, beaches, national parks and even urban areas depend on their natural beauty to attract visitors and enchant them during their stay.

According to the World Economic Forum, a decline in biodiversity is one of the top 10 risks to the global economy. The tourism industry, and close to 1.4 billion tourists travel internationally every year. The magnitude of this sector highlights the significant impact it can have on our environment. It establishes an incentive to protect our natural environments for the benefit of the industry, the visitors and communities in popular destinations.

To elaborate more trees, bushes and wetlands slowly down water and help soil to absorb water. When they are removed it can increase flooding.

Trees and other plants clean the air we breathe and help us tackle the global challenge of climate change.



bon dioxide.

Coral reefs and mangrove forests act as natural defences protecting coastlines from waves and storms. Additionally, many of our medicines, alongside other complex chemicals also originate from plants.

Spending time in nature is increasingly believed to lead to improvement in people's physical and mental health. Simply having green spaces and trees in cities has proved to decrease hospital admissions, reduce stress and lower blood pressure. Plants absorb water from the soil and fix carbon from the atmosphere. They also reduce the city's heat load. Even though native plants would probably support more species of insects and other wildlife, supporting ecosystem.

We are now losing biodiversity at up to 10,000 times faster than it was disappearing 100 years ago, we must fight the biodiversity crisis and climate change at the same time.

One million species could soon face extinction. Climate change is accelerating at a breakneck pace,

threatened mammal species and a quarter of threatened birds.

According to a study published in Science last year, if nothing is done to curb our carbon emissions, nearly 50 percent of the planet's insects, which make up the foundation of food webs all over the globe, could disappear by the end of the century.

Further the May 2019 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) global assessment warns of nature's dangerous decline with more than 1 million species threatened with extinction. This is why we must fight the biodiversity crisis and climate change at the same time.

We also must be well aware that the world is losing biodiversity at an alarming and accelerating rate. It is estimated that up to 100,000 species go extinct each year largely due to human activities.

Available evidence shows that while human beings represent just 0.01 percent of all living creatures, they have caused the loss of 83 percent of wild mammals and half of plants. By saving

the world. The diversity of life on earth is essential to our wellbeing. But nature is under pressure like never before due to our needs for food, water, land and energy. Biodiversity, the variation of life on earth, is a major factor in nature's resilience.

One of the best strategies for combating global warming is to preserve those habitats that naturally lock up most carbon. Tropical forests, where giant ancient trees constantly absorb carbon dioxide from the atmosphere and then fix it into the soil store around 40 percent of all the carbon on land. This is why protecting natural forests like Bwindi and Mahira is so essential.

But it's one thing to identify the importance of protecting animals and their habitats, and another to do it. So forest health and conservation are key weapons in the worldwide fight against climate change. It is important we curb global carbon pollution to a level that our forests and other ecosystems can process naturally.

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'Gas cylinders are not actually clean'

EDITOR: Thank you energy minister Ruth Nankabirwa for the efforts to transform the country from fossil fuels to clean energy.

This clearly shows that Uganda has the potential to lead the struggle to ensure that all people get access to clean and affordable energy for the common good. On July 5, 2022, you launched a sh900b free cooking gas project to distribute free gas cylinders to the vulnerable communities. The intervention targeted LPG cooking energy to grow from current 0.8% to 20% of Ugandans households by the year 2030. The move was to distribute at least one million liquidified petroleum gas cylinders and burners to Ugandans in an effort to use clean energy. This was a good initiative but not a good option for the target group.

About 100 households received the yellow gas cylinders at the launch the project in Wakiso district and each household that received had confirmed that they have capacity to refill the cylinder at sh100,000. However, the people that received these gas cylinders have no capacity to refill them and this will force them to change cylinders colour from yellow such that they can be sold off.

Gas cylinders are not actually clean energy best alternatives because they have compressed gases that are toxic, flammable, corrosive and inert which is very dangerous to human life.

The best solution for Ugandans to transit to clean energy is the use of solar power which is sustainable and cheap. Solar energy doesn't need monthly subscriptions since its powered by nature (the sun) that is everywhere and free of charge. The other advantage is that Uganda is one of the countries that have enough sun throughout the year with mean solar radiation of 5.2 per square metre per day on a horizontal surface. With such a blessing Uganda shouldn't be struggling with monthly bills for electricity, gas cylinders that a toxic and electricity that is very expensive for all Ugandans. Since there is already free source of energy that is cheap and sustainable the emphasis and investment should be directed at solar energy.



Gerald Barekye

The writer is research associate

Upcoming events

September 1, 2022; Hoima and Kikuube: Engage Ministry of Lands to involve the Save Bugoma Forest Campaign in the Bugoma forest boundary opening exercise

September 9, 2022; Kampala: Public debate on the need to address obstacles to Uganda's clean energy transition efforts

September 12, 2022; Hoima and Kikuube: Community empowerment training on Bugoma forest's tourism potential

September 18, 2022; Kampala: Engage Ministry of Energy to desist from awarding a construction license to the EACOP Company

September 19-21, 2022; Hoima and Kasese: Support women and youth to engage parliament for a law to protect solar energy consumers from sub-standard products

September 19-30, 2022; Nationwide: Support data collection for research aimed at promoting off-grid electrification

About Africa Institute for Energy Governance (AFIEGO)

AFIEGO is a non-profit company limited by guarantee that was incorporated under Uganda's Companies Act. AFIEGO undertakes public policy research and advocacy to influence energy policies to benefit the poor and vulnerable. Based in Kampala-Uganda, the non-profit company was born out of the need to contribute to efforts to turn Africa's clean energy potential into reality and to ensure that the common man and woman benefits from this energy boom. Through lobbying, research and community education, AFIEGO works with communities and leaders to ensure that clean energy resources are utilised in a way that promotes equitable development, environmental conservation and respect for human rights.

Our Vision

A society that equitably uses clean energy resources for socio-economic development

Our Mission

To promote energy policies that benefit poor and vulnerable communities