



REPORT OF THE REGIONAL SEMINAR ON LOCALIZING DEBATES ON COOKING FUELS AMID ENERGY TRANSITION AND CLIMATE CHANGE DILEMMAS IN EAST AFRICA

**Held at the School of Law, Makerere University
in collaboration with St. Augustine University of Tanzania and
University of Copenhagen, Denmark.**

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Table of Contents

Table of Contents	i
List of Acronyms	iii
1.0 Introduction:	1
1.1 Welcome and Opening Remarks	1
1.2 Presentation of papers and abstracts	2
A. Papers presented	2
Title of paper: <i>A Gendered Analysis of Charcoal Production and Use in Northern Uganda: Tensions and Dilemmas of the Decarbonisation Agenda</i> — By Dr. Zahara Nampewo	2
Title of paper: <i>Localizing Debates on Cooking Fuels amid Energy Transition and Climate Change Dilemmas in East Africa</i> — By Oijuke Karen Precious	4
Title of paper: <i>Assessing Socioeconomic and Cultural Conflicts in Energy Transitions in Uganda</i> — By Emmanuel Lwankomezi.....	5
Title of paper: <i>Charcoal Value Chains and Energy Transitions in East Africa: Insights from a Semi-Systematic Literature Review</i> — By Jakob Dreyer & Lukas Kirby	6
B. Abstracts presented	8
Title of Abstract: <i>Assessing the Impact of Result-Based Financing (RBF) on Clean Cooking Technology Adoption in Rwanda: Socio-Economic and Environmental Benefits</i> — By Benedicte Manishimwe	8
Title of Abstract: <i>Localising Debates on Cooking Fuels amid Energy Transition and Climate Change Dilemmas in East Africa: A Focus on the KUNO School Biochar Initiative in Garissa, Kenya</i> — By Juvenal O. Araka.....	8
Title of paper: <i>Cooking Fuels, Energy Transition, and Climate Change in East Africa: Legal Dimensions and Perceptions in Tanzania</i> — By Neema Abraham Mateka	9
Title of Abstract: <i>Policy Frameworks for Sustainable Energy in the Democratic Republic of Congo: Between Legal Provisions and Perceptions of Local Communities</i> — By Prof. Kilele Muzaliwa	10
Title of Abstract: <i>Charcoal Regulation in Uganda: A Critical Legal Review</i> — By Emmanuel Kaweesi.....	11
Title of Abstract: <i>Energy Transition, an Obligation of Environmental Law in an Emerging Country: Burundi</i> — By Emelyne Hakizimana	12
Title of Abstract: <i>Uganda's Green Finance and Urgency of Energy Transition: A Reflection from Households Producing Green Charcoal to Sustain Livelihood</i> — By Judith Awacorach.....	12
Title of Abstract: <i>Local Institutions Debates: A Precursor to Lasting Solutions to the Cooking Fuel Challenge Amidst Climate Change in East Africa</i> — By Dr. Nabulya Jesca, co-authored by Dr. Kezia H. Mkwizu, Dr. Jerita J. Mwambi, Prof. Eunice Fonyuy Fondze-Fombebe, Dr. Ajibola F. Oladejo, and Dr. Dumisani Hompashe.....	13
Title of Abstract: <i>Integrating the Resource Nexus Approach into Sustainable Livelihoods, Climate Change, and Energy Transitions in Uganda: Reflections from Sedentary Communities around Lake Wamala in Mityana</i> — By Baker Matovu	14

Title of Abstract: <i>Gender Dynamics on Cooking Fuels, Energy Transition and Climate Change Mitigation: Perspective from Northern Uganda</i> — By Dr Mary Ejang	14
Title of Abstract: <i>Determinants of Relevance for Adoption of Renewable Energy Interventions among Refugees and Host Communities in Terego District, Uganda</i> — By Denis Gobo, Alfonse Opio, Clement Okia, Christine Oryema & Justine Kilama.....	15
Title of Abstract: <i>Charcoal Production and Consumption, a Threat to Sustainable Forest Management in Tanzania</i> — By Greyson Z. Nyamoga	16
Title of Abstract: <i>The Shift to Clean Cooking: Exploring Women’s Perspectives in Climate Change Mitigation – A Case Study of Lake Zone, Tanzania</i> — By Dr Janeth John Mushi	16
Title of Abstract: <i>Overcoming Barriers to the Adoption of Alternative Urban Energy Sources in East Africa: Evidence from Dar es Salaam City in Tanzania</i> — By Emmanuel Patroba Mhache	17
Title of abstract: <i>Impact of Clean Cooking Energy on Women’s Lifespans in Tanzania: Evidence from Autoregressive Distributed Lag (ARDL) Analysis</i> — By Jackson Bulili Machibya.....	18
C. General comments by the reviewers	18
1.3 Closing Remarks	19

List of Acronyms

BSU	:	Bishop Stuart University
DRC	:	Democratic Republic of Congo
CRIC	:	Centre for Resolution of International Conflicts
EAC	:	East African Community
HURIPEC	:	Human Rights and Peace Centre
ICESCR	:	International Convention on Economic, Social and Cultural Rights
LPG	:	Liquefied Petroleum Gas
RBF	:	Results-Based Financing
REDD+	:	Reducing Emissions from Deforestation and Forest Degradation
SAUT	:	St. Augustine University of Tanzania
SoL	:	School of Law
UN	:	United Nations
UNFCCC	:	United Nations Framework Convention on Climate Change

1.0 Introduction:

The Human Rights and Peace Center (HURIPEC) of the School of Law, Makerere University, The Centre for Resolution of International Conflicts (CRIC) at the University of Copenhagen in Denmark and St. Augustine University of Tanzania (SAUT), in Mwanza, Tanzania are conducting a study titled: *“Charcoal Conflict in Climate Change’s Decarbonisation Dilemmas: Knots of Livelihood, Nutrition, Communities, Gender, Migration and Energy in East Africa”*. The main objective of the project is to analyse and understand how global climate change mitigation policies (decarbonisation) condition charcoal politics and socio-economic dynamics in energy-stressed countries down to local levels, and how to manage these conflicts.

In order to achieve the project goals and objectives, HURIPEC organized a hybrid regional seminar, dubbed the Science Conference, under the theme: *Localizing debates on cooking fuels amid energy transition and climate change dilemmas in East Africa*. The seminar was held on 29th September 2025 at the School of Law, Makerere University and involved presentation of papers and abstracts by academics, policymakers and students from Uganda, Kenya, Tanzania, Burundi, Rwanda, and the Democratic Republic of Congo. The seminar provided a platform for the participants to discuss

This report presents a summary of the papers and abstracts presented by the various participants, and the feedback from the panel of reviewers. It is divided into three parts, with part one providing the welcome and opening remarks as well as this introductory part. Part two presents the brief on the abstracts and the papers presented and the feedback from the reviewers; while part three are the closing remarks.

1.1 Welcome and Opening Remarks

Welcome remarks were made by the main organizer of the seminar and Principal Investigator of the project in Uganda, Dr Sylvie Namwase. She introduced the seminar’s history, purpose and scope, announcing that it had been fully funded by the Ministry of Foreign Affairs of Denmark to support science engagement research under a bigger project on Charcoal Conflicts and climate change dilemmas in East Africa.

Opening remarks were then made by the Directors and Principal Investigators of the partner institutions involved in the research project. In his remarks, Dr. Busingye Kabumba, the Director of HURIPEC, welcomed the participants to the seminar and emphasized the critical importance of the subject of energy transition, observing that it is an element that borders on justice and on our existence as human beings. He highlighted the growing concern over climate change and its socio-economic effects on the environment, social cohesion and peoples’ livelihood and called for increased attention and cooperation of actors at the local, national, regional and international level towards addressing this global challenge.

On behalf of SAUT, Prof. George Mutalemwa, the project's co-Principal Investigator for SAUT, decried the detrimental effects that have arisen as a result of the increased charcoal production in East Africa, with such activities fueling deforestation and environmental degradation and urged for home-grown solutions in facilitating energy transition in East Africa.

Mr. Frederik Kawooya, Programme Advisor at the Royal Danish Embassy, emphasized the critical nature of the subject of energy transition, describing it as a topical issue that touches on vast sectors of society and on peoples' livelihoods, health, culture, among other areas. He expressed gratitude to the conveners of the conference for providing such a platform for researchers, academics and policymakers to dialogue on a key subject, noting that it is through such avenues that solutions to most of the pressing needs of society are devised. He called upon stakeholders to ensure energy solutions that take into account the local realities and context.

In her remarks, Dr. Zahara Nampewo, the Deputy Dean of the School of Law (SoL) at Makerere University, who represented the Dean of the SoL, observed that the conference provides an opportunity for the stakeholders to share information that would potentially shape policy in areas such as energy transition. She described the deliberations on the subject of energy transition as timely, in light of the increasing levels of deforestation and the effects of climate change.

1.2 Presentation of papers and abstracts

A. Papers presented

Title of paper: *A Gendered Analysis of Charcoal Production and Use in Northern Uganda: Tensions and Dilemmas of the Decarbonisation Agenda* — By Dr. Zahara Nampewo

The paper examines the gender dimensions that come along with energy transition from charcoal as the domestic source of energy to households in Uganda, to greener and cleaner energy sources. It interrogates the complex dynamics, dilemmas and tensions around charcoal, considering its valuable importance in the socio-economic and cultural lives of many people in Uganda. Using Acholi sub-region as the case study, the paper is guided by the assumption that gender equality is intrinsically linked to sustainable development and a major driver for economic growth. The paper relies on the climate mitigation decolonization and feminist, political and ecological frameworks. It also draws from the gender analysis framework and notes that whereas gender is increasingly recognized in energy studies, it is often treated as a peripheral than central element to analysis.

Drawing from an analysis of the charcoal value chain, from the stage of charcoal production to delivery to the market, the paper demonstrates the level of exclusion, inclusion, and actors along the different element of the value chain, and their roles and benefits. The paper highlights the connection women have with charcoal in the domestic arena. It asserts that in Acholi sub-region, the domestic value chain is socially constructed and governed by the dominant gender perspective, where women's labour is maximized in the kitchen space. It reveals the shifting patterns in energy use, with many young women opting for charcoal compared to firewood. It also observes the limited participation of women in the charcoal production chain although a few participate at the retail level. The paper reveals the use of

women in by-passing the checkpoints erected to control the transportation of charcoal in line with the presidential charcoal ban. The paper recommends the need to take into account women's lived experiences in Uganda's energy transition agenda, the participation of women as key actors in the energy transition initiatives, and the need to ensure that the implementation of the energy transition agenda is done in a gradual manner, taking into account the interests and aspiration of different actors.

Feedback from the reviewers:

The reviewers noted that the paper touches on a contemporary and critical subject, that is, the right to energy access in the climate change transition process. It places local contexts, and particularly the rights of rural women to access energy in the global energy transition debate.

It was observed that the paper focuses on Acholi sub-region, a region that has been at the center of charcoal production and has recently been the target of the charcoal ban. Acholi region is also a post-conflict region, having experienced over a two-decade Lord's Resistance Army (LRA) conflict, with unique challenges especially for women.

The paper underscores the importance of energy access and sufficiently buttresses the right to energy / right to access to energy in existing human rights frameworks. Although the right may not be explicitly provided for in the different instruments, the paper successfully links it to the rights in the existing frameworks such as the right to adequate standard of living under the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the right to adequate living conditions of particularly rural women under the Convention on the Elimination of Discrimination against Women (CEDAW). The paper also clearly articulates the legal provisions in the Constitution and other local laws, as well as the existing policies.

The methodology is well-canvassed as the paper employs a qualitative approach, with Focus Discussion Groups (FGDs) being the main data collection method, in addition to interviews.

The literature review is quite extensive, with a major focus on the definition of charcoal and the dangers of its use.

The paper is well-grounded in theory, as it relies on sustainable livelihood framework and the feminist political ecology to support the enhanced protection of the right of rural women to access energy – in this case participation in the charcoal value chain.

The paper clearly articulates the tensions between the global agenda for clean energy and the national development agenda on the one hand, and the complex local dynamics, the role of charcoal and gender on the other.

Suggestions / areas of concern

While the literature largely focuses on the dangers of charcoal production and use, limited attention is given to exploring the tensions between the global movement to clean energy and the local perspectives. It may be useful to explore how countries have navigated this path in the context of charcoal and other existing forms of what is considered 'unclean energy'.

The paper does not make reference to some important instruments such as the United Nations (UN) Framework Convention on Climate Change (UNFCCC) and the Paris Convention, which are the foundation of the global energy transition and source of tensions that arise between these efforts and the local approaches. Additionally, there is also the UN-REDD+ to which Uganda is a member. These global instruments influence the national approaches. For instance, Uganda has developed the National REDD Strategy and Action Plan.

There is a mismatch between the study hypothesis and the findings. Since the paper focuses on examining the gender dynamics and the tensions within the charcoal value chain, the findings seem not to be in tandem with the subject of investigation. For instance, the study found that charcoal use is much less compared to the use of wood, with 20% of Ugandans relying on charcoal and 80% on wood fuel. The question that emerges is why then should the study put more emphasis on charcoal and not on wood fuel which is more commonly used than the other resources.

While the paper effectively examines the gender dynamics of charcoal production and use, it falls short on espousing the tensions / dilemmas within the charcoal and how the global energy transition push can be reconciled with the local efforts.

The paper needs to undertake a comparative analysis with districts such as Kitgum and Kotido to highlight the best practices or divergent challenges between those that have developed charcoal ordinances and those that haven't yet put in place any instruments limiting charcoal burning / production.

The paper needs to assess the current institutional framework governing charcoal value, which includes the Ministry of Water and Environment, the Ministry of Energy and Mineral Development and Local Governments, address gender-related aspects within the sector.

There is a need to consider the impact of investment in supporting green charcoal and clean cooking programs. Financing structures should be designed to ensure accessibility for women and marginalized groups. In addition, incentives should be set up to encourage participation in these initiatives.

Title of paper: *Localizing Debates on Cooking Fuels amid Energy Transition and Climate Change Dilemmas in East Africa* —By Oijuke Karen Precious

This paper examines the localization of debates on cooking fuels within the broader context of energy transition and climate change dilemmas in East Africa using Bishop Stuart University of Uganda (BSU) as a case study. Using a multidisciplinary approach, combining energy studies, climate governance, and socio-cultural analysis, the paper interrogates the complexities of shifting towards cleaner fuels from a gender perspective. It observes that women bear the heavier burdens and calls for the strengthening of gender-responsive energy programs that promote women's participation in clean cooking programs. It further calls for the integration of clean cooking strategies in Uganda's National Development Plan and climate commitments; enhancing inter-ministerial coordination; expanding of financing mechanisms, including microcredit schemes and targeted subsidies for clean energy technologies; promoting of knowledge exchange and best practices among the East African Community (EAC) Partner States on clean cooking technologies, supply chains, and safety standards;

and strengthening collaboration between academia, government, and civil society to generate evidence-based, locally adapted policies.

Feedback from the reviewers:

The literature looks at the broader pertinent themes such as energy transition and carbonization, gender, and the dimensions of energy, equity and justice. However, whereas the literature is synthesized, it does not provide deeper information and does not illustrate the gaps. In addition, most of the literature is about western material with very limited focus on the local literature. There is a need to consider looking for literature that examines the subject from the EAC and Africa so as to show the local perspectives.

Furthermore, the paper promises more than it delivers in some areas. While the paper promises to engage on various perspectives, such as on political economy, environmental sociology, gender transition theory, climate change and development dilemmas, it does little in teasing out these issues.

The paper adopts the theme of the paper as its topic, which presents a lack of creativity from the author. The author needs to creatively develop a topic that best captures the broader subject that the paper examines.

The paper does not provide the legal and policy framework upon which the paper may anchor the voices and perspectives of BSU. Examining Uganda's laws, policies and strategies related to energy would lay a good foundation for discussing varying aspects related to participation, energy financing, climate governance, among others.

The author needs to revisit the proposed methodology and identify approaches to be used in order to effectively deliver on the paper. Relatedly, the paper does not present community voices, yet it envisages to use both primary and secondary data.

The author needs to make a case of why the paper selected BSU as a case study to localize the voices and debates in regard to energy transition and to frame such voices within the broader East African context. The paper largely places emphasis on aspects at the East African level, with limited attention to BSU, which is the paper's main focus.

Title of paper: *Assessing Socioeconomic and Cultural Conflicts in Energy Transitions in Uganda* — By Emmanuel Lwankomezi

This paper examines the tensions and pressures that have emerged as communities shift / transition from using traditional energy sources – such as charcoal and firewood, towards greener energy alternatives. It observes that this shift is not a technical or environmental challenge, but one deeply intertwined with the socio-economic and cultural fabric of society. Using the conflict and the social constructivism theories, the paper reveals socio-economic and cultural concerns associated with charcoal production and use. It highlights several factors that influence charcoal use, such as poverty and the lack of affordable / cheaper energy alternatives.

Feedback from the reviewers:

While the paper states that there are interventions that have been taken to enable communities in northern Uganda access clean energy, it falls short in highlighting the nature of the interventions. It would be prudent to explore these interventions so as to demonstrate how such undertakings help to address the circumstances that impact communities in northern Uganda from accessing clean energy.

The paper grounds its arguments on two theories: social constructivism and conflict theory. While grounding studies on theories help in providing a foundation for explaining phenomena, the paper does not how the theories the paper adopts are reflected in the study.

The study highlights statistical findings on varying characteristics such as households that had adopted alternative energy sources and on the level of participation of both men and women in energy technology related decision making. While this is commendable, the paper does not provide data on the sampled population, including the sampled districts and justification for those sampled areas, to support the findings. In addition, while the paper provides quotations capturing respondent voices on the issues under investigations, it does not indicate the category where such respondents fall (traders, producers, or consumers) – which limits the strength of the quotation. Providing the nature or category of respondent helps to enrich data analysis and discussion.

The paper observed that the issues that were canvassed in the study were sensitive and therefore some information would not be easily obtained from the field. The author may consider pointing out the topics that were sensitive and how those topics were handled in the literature review.

It is also important to note that there is much more meaning attached to charcoal than just it being an energy source. The author was advised to delve deeper into the other meanings or cultural attachments connected to charcoal.

Title of paper: *Charcoal Value Chains and Energy Transitions in East Africa: Insights from a Semi-Systematic Literature Review* —By Jakob Dreyer & Lukas Kirby

This paper is a systematic literature review that aims to help readers understand what the literature has already said about the effects of international interventions on energy transition. This study is guided by the question of ‘what changes do internationally induced interventions into charcoal practices in Tanzania, Kenya and Uganda cause’. It synthesizes the fragmented body of research on charcoal and climate governance and energy transitions and identifies key demographic thematic and conceptual gaps. It also examines the tensions in the literature.

Using a systematic review approach, the paper analysed 114 articles and found that about 75% of the articles focus urban contexts and at country level, Uganda is given very limited focus in the articles. In addition, it reveals that the literature puts emphasis on forestry (47) and the energy sector (46), and priority is given to technological and incentive0driven solutions promoted through frameworks such as REDD+, with limited attention to regional actors such as the European Union and the African Union, the urban demand dynamics and the social impacts. The paper identified areas for future research in areas of urban charcoal dynamics, justice and equity impacts, institutional and governance dimensions, and the global linkages.

Feedback from the reviewers:

The author should consider rephrasing the research question from ‘what changes do internationally-induced interventions in the charcoal value chains in Tanzania, Uganda and Kenya cause’, to reflect on ‘the effects of international interventions on charcoal value chains’. The question proposed by the authors creates challenges in understanding the causal effects they are trying to arrive at.

The paper is a systematic literature review which aims to help readers understand what the literature has already said about the effects of international interventions. The paper synthesizes the fragmented body of research on charcoal and climate governance and energy transitions. It identifies key demographic thematic and conceptual gaps. It also examines the tensions in the literature. In order to make the contribution much more visible and comprehensible to the reader, the paper could delve into the underlying logics at play to sharpen these logics. The paper majorly focuses on examining whether climate governance interventions prioritize ecological mitigation goals over social realities and, if so, provide reasons why that is the case. In addition, the paper speaks about the tensions between livelihoods and ecology. However, it does not identify the tensions and what they mean for the following parameters: 1) empirical reality; 2) the trade-offs households would make; 3) for policy framing; and 4) for the literature itself.

While systematic review is a good technique for reviewing literature, it tends to omit some of the underlying forces of logics and findings. One effective method to counter this omission is the bibliometric analysis. The Bibliometric analysis helps to understand the connections between the different research constituents, authors, journals, literature published, providing space to examine contributions of these different constituents. Bibliometric analysis also helps in science mapping, which helps understand the structural connections (intellectual connections), which also influences where such material may be found, which factor is also shaped by the funding source. Bibliometric analysis also helps in network analysis, and in understanding some of the constituents (such as the authors, journals, and the institutions).

In regard to the methodology, the paper uses a systematic review approach, which is appropriate, well-articulated and executed. However, the paper should define what is meant by a systematic approach, how the paper has excluded the gray literature and whether such exclusion would affect the results of the review. Additionally, the methodology does not provide the interpretative process by the authors, in terms of how they interpreted the different studies, how they managed the inconsistencies on the coding, and whether these inconsistencies had an effect on the coding.

The paper present shows an imbalance on studies on Uganda compared to Kenya and Tanzania, and it largely places emphasis on technological advancement and the REDD+ as the most dominant features in the literature. The study should consider exploring various aspects to determine why Uganda is under studied. For instance, the study would delve into the examining the factors as to why Uganda is under studied, an analysis into Uganda’s political context, why technological fixes dominate the literature, examining the available funding streams as this has the potential of influencing the biases, and why the justice institutions receive less attention.

The paper, in its findings, highlights a limited mention of charcoal explicitly. This might not be the case as charcoal is denoted by several terms such as wood fuel, fuel wood, biomass, etc. There is a need to exercise caution here so as to avoid being biased.

There are also concerns about the composition of the authors of this paper as they hail from the global north, and yet their study focuses on East Africa, which calls for the need to balance the authors so as to have authors from the global south telling their story.

B. Abstracts presented

Title of Abstract: *Assessing the Impact of Result-Based Financing (RBF) on Clean Cooking Technology Adoption in Rwanda: Socio-Economic and Environmental Benefits* — By Benedicte Manishimwe

This abstract examines the role of RBF programs in promoting clean cooking technologies in Bugesera District, Rwanda. It observes that whereas biomass use accounts for over 85% of domestic energy use in Rwanda, with 97% of the rural population relying on firewood and charcoal, this energy source has associated health risks such as indoor air pollution, fuels environmental degradation and gendered socio-economic burdens, particularly for women and girls. The abstract notes that Rwanda, in a bid to promote clean energy access and solutions, has implemented the RBF model, and seeks to demonstrate the model's socio-economic and environmental benefits.

Feedback from the reviewers:

It was observed that Results Based Financing can potentially promote clean cooking solutions since some of the clean energy technologies are quite new in the East African region and not so many private sector actors express interest in investing in such technologies when they are profit-oriented. It was further noted that the RBF concept could help de-risk the market and facilitate the private sector players to invest in clean energy solutions.

The reviewers noted that abstract relies of speculations by highlights expected outcomes / preliminary findings, and yet it is a study that is yet to be conducted and therefore relies on speculation.

Title of Abstract: *Localising Debates on Cooking Fuels amid Energy Transition and Climate Change Dilemmas in East Africa: A Focus on the KUNO School Biochar Initiative in Garissa, Kenya* — By Juvenal O. Araka

This abstract explores the interplay between technology, culture, livelihoods, and policy amidst the energy transition debate. Using the case study of KUNO School Biochar Initiative in Garissa, Kenya, the abstract seeks to highlight the lived realities and complexities underlying the energy transition endeavors and demonstrate how education institutions can be utilized as avenues / hubs for knowledge generation of clean energy technologies and solutions.

Feedback from the reviewers:

The paper largely demonstrates how institutions, such as those academic settings, are adopting clean energy solutions. This is a welcome development and the practice could be replicated in other institutions such as hospitals and in school feeding programs.

The author should consider making reference to Kenya, where the President issued a directive on clean energy in schools, which requires all public boarding schools to transition from the traditional cooking fuels to Liquefied Petroleum Gas (LPG) for cooking. This directive is part of the broader strategy of increasing the use of LPG in Kenya and part of Kenya's wider commitment towards increasing the uptake of clean energy in various sectors, including education.

Title of paper: *Cooking Fuels, Energy Transition, and Climate Change in East Africa: Legal Dimensions and Perceptions in Tanzania* — By Neema Abraham Mateka

Neema's abstract seeks to examine the legal dimensions of cooking fuels amid energy transition and climate change in East Africa, using Tanzania as a case study. Tanzania provides a compelling context given its acute energy poverty, heavy reliance on biomass, and evolving environmental policy landscape. Using a doctrinal legal methodology, the study critically reviews statutes, policies, and regional instruments, applying content analysis and comparative analysis with the European Union's integrated energy governance model. The abstract reveals preliminary findings and notes that although such instruments acknowledge the risks of biomass dependence, they fall short of establishing binding targets, institutional accountability, or justiciable rights to clean energy. It recommends reforms to consolidate the fragmented laws, establish binding national and regional commitments, and adopt a rights-based approach that recognizes access to sustainable energy as integral to the constitutional right to a clean and healthy environment.

Feedback from the reviewers:

The abstract demonstrates clear knowledge of context, illustrating national, regional and international processes and the core principles of a just transition.

The study intends to rely on a case study approach as its methodology and exclusively on secondary data. Since the study envisages exploring perceptions of those affected by the transition, the study should consider employing methods of obtaining primary data from such respondents and use the secondary data to explain the information gathered through primary sources.

While the study envisages focusing of Tanzania as the case study, it heavily dwells on East Africa. It is critical that the author focuses on Tanzania and makes reference to East Africa for purposes of demonstrating inconsistencies or points of departure of Tanzania's frameworks from what is envisaged at the East African level.

The study should clearly distinguish between Tanzania and the EAC. These are not the same as the study envisages. Important to note is that the context and policy status of the EAC Partner States

differs as the countries under that bloc are at different places and stages in terms of policy development. Tanzania has specific vulnerabilities different from other EAC countries.

While the study envisages focusing on central and Lake zones (Singida, Dodoma, Shinyanga, Simiyu, Geita & Mwanza) as the case studies, it does not provide any justification for their selection. The study needs to show either that Tanzania has devolved energy policies since it is a study on legal perceptions, or that these locations have been selected for their vulnerabilities.

The study should consider exploring some international instruments and documents such as the Tanzania Country Climate and Development Report from the World Bank, African Union Sustainable Charcoal Policy Framework since the regional bloc recognizes charcoal to be a big part in the energy mix in sub-Saharan Africa in the future; the Tanzania Energy Compact 2025, which sets out binding targets and commitments; instruments at the European Union which should be considered as a benchmark, as well as those developed under the Economic Community of West African States and the South African Development Community frameworks.

The proposed study should consider just energy as a framework to anchor the analysis, and the conclusion should establish whether the framework is sufficient for a just charcoal transition process.

Title of Abstract: *Policy Frameworks for Sustainable Energy in the Democratic Republic of Congo: Between Legal Provisions and Perceptions of Local Communities* —By Prof. Kilele Muzaliwa

The proposed study seeks to examine the local and national approaches of regulating charcoal production and trade in the Democratic Republic of Congo (DRC). It recognizes the complexities of enforcing the codes / mechanisms for regulating the charcoal trade, especially in the Eastern part of the country which is facing instability, with the armed conflicts and warlords benefitting from the trade. The study contextualizes the challenges local communities face in enjoying their traditional rights amidst the complexities in accessing the forest resources and the increased unregulated activities within the forest. The paper urges for policy that facilitates local communities' access to forest resources, as well as improved governance of such resources.

Feedback from the reviewers:

The proposed study is quite contemporary and covers a country with quite unique challenges, with a long history of conflicts. In addition, DRC is characterized by limited state authority and without any regulations on charcoal production and trade. Due to these complex dynamics, the paper needs to go beyond examining the local / national mechanisms and consider the regional and international approaches / mechanisms such as the International Conference on the Great Lakes Region (ICGLR), drawing from the experience of how other resources like minerals have been managed in the country.

Title of Abstract: *Charcoal Regulation in Uganda: A Critical Legal Review* —By Emmanuel Kaweesi

Kaweesi's study envisages examining the regulatory framework governing charcoal production, use and trade in Uganda, and their implications for energy justice and equity. The study that while Uganda has a fairly comprehensive legal and policy regime governing forestry management, environment and energy, there is none specifically regulating charcoal production, trade and use in the country. It notes that charcoal production and trade has been subjected to mixed controls, such as vigilante enforcement, political statements, ministerial and presidential executive directives, and calls for the enactment of a specific legislation on that promotes sustainable charcoal production.

Feedback from the reviewers:

The abstract does not clearly highlight the problem it seeks to address. While the study emphasizes the lack of a clear legal and policy framework as a problem, this contrasts with most of the literature that points to gaps in the law and practice. There is therefore a need to critically think beyond the purely legal approach to position the study in a much broader context.

Additionally, there is need to consider exploring the contextual environment within which the lack of / limited framework exists. The study needs to explore some of the questions such as: Have Ugandans just started using charcoal? Why is the debate on the legal framework now? Why have the existing frameworks failed? What is the charcoal wood and charcoal politics in Uganda today to justify the lack of a legal framework? And how does the charcoal politics shape the debates in law and at the grassroots level? Who are the actors within the charcoal debates?

The proposed paper by Kaweesi seems to be similar to one done by Emmanuel Okurut titled 'Charcoal and Climate Change: A Legal Perspective'. Okurut's paper analyses relatively similar laws s those examined by Kaweesi. There is therefore a need for Kaweesi's study to demonstrate how different his paper is from that authored by Okurut because both seem to analyse relatively similar laws.

The proposed study emphasizes that the Executive Orders issued by the President are illegal. There is a need to make reference to some court decisions that have in fact held to the contrary, stressing the legality of the Executive issued by the President. Some of the cases include that of *Nanding v Attorney General*, where the court relying on *Namuganza v Attorney General*, emphasized the self-enforcing nature of presidential directives and Executive Orders. There are also decisions, which though related to land matters, are relevant for the study. These include *Horizon Coaches v Mbarara Municipal Council* where the Constitutional Court emphasized the legal duty of public bodies to enforce directives, *Nakasero Market Sitting Vendors and Traders Ltd v Attorney General*, where court affirmed the legality of Executive Orders. While the Executive Orders might seem to be void, it is critical that the proposed paper examines whether such Orders serve a purpose, especially in the current context where they may be enforced by the informal institutions better than the formal institutions on account of having that power and presidential backing.

The recommendations need to be framed within the socio-legal, political context and the paper should focus on perspectives that enrich the general debate about energy transition.

Title of Abstract: *Energy Transition, an Obligation of Environmental Law in an Emerging Country: Burundi*
—By Emelyne Hakizimana

This proposed study seeks to examine the analyse the obligations of environmental law on energy transition and as well as identify the challenges the impact the energy transition agenda in Burundi. The study recognizes the widespread use of charcoal in the country, with the resource being the main source of energy accounting for 96% of the total energy consumption in Burundi. It recognizes Burundi being signatory to various international and regional instruments relating to the environment and there bound to ensure environmental protection. It intends to interview various stakeholders so as to understand and contextualize the dynamics within the energy transition agenda. It urges for the development and enforcement of laws that provide for environment protection in light of the obligations of Burundi being a state party to various instruments.

Feedback from the reviewers:

The paper illustrates knowledge of context and energy challenges of Burundi as an emerging country. However, it is important for the author to provide an internationally agreed upon definition of an emerging country and the characteristics of such a country.

While the paper presents a problem statement, it is not clear about the problem it seeks to address. The author needs to delve into the negative impacts of environmental degradation / climate change so as to make a case for undertaking the proposed study.

The study needs to establish and provide information about the percentage contribution of charcoal to Green House Gas emissions and frame in the link between deforestation; for charcoal, how much is lost in terms of carbon capture and contextualize. The author should consider looking at the African Development Bank National Climate Change Profile for Burundi, which outlines the country's aspirations on energy transition.

While the proposed study enumerates the international obligations of Burundi, these should be expanded to include the country's climate obligations. The paper should, in addition, focus on climate change and energy transition policies, including the International Court of Justice Advisory Opinion on the Obligations of States in respect to climate change.

The study needs to draw a distinction between environmental degradation and climate change as these should not be treated as the same.

Title of Abstract: *Uganda's Green Finance and Urgency of Energy Transition: A Reflection from Households Producing Green Charcoal to Sustain Livelihood* —By Judith Awacorach

Awacorach's paper aims to examine the dilemma surrounding or shaping clean and renewable energy transition in resource constrained settings to sustain livelihood in households producing green charcoal in Uganda. The paper reveals a significant relationship between finance and livelihood outcomes, and observes that the lack of sufficient and affordable financing and other risk factors in the green charcoal value chain impacts the transition to alternative sources of cooking fuel and

technology. It calls for increased investments, prioritization of vulnerable populations, and integration of clean and renewable cooking strategies into broader energy access efforts to ensure a just and inclusive transition agenda.

Feedback from the reviewers:

The author needs to demonstrate explain the ‘urgency’ to transition to alternative source of energy, as used in the title of the abstract. There is need to highlight the likely implications if the Ugandans do not transit and adopt the new energy technologies, which would best define the urgency of the country to transition.

While the methodology outlined in the abstract envisages collecting both qualitative and quantitative data, there is need to cite some of examples of the kind or type of data to be collected.

The paper needs to have statistical information / data on the percentage of people using biomass, wood, charcoal that are within the constrained resources (financial, cost, time) because not all the households are constrained. It is crucial for paper to examine the cost of the alternative sources so as to ascertain whether this factor impacts the energy transition endeavors.

Title of Abstract: *Local Institutions Debates: A Precursor to Lasting Solutions to the Cooking Fuel Challenge Amidst Climate Change in East Africa* —By Dr. Nabulya Jesca, co-authored by Dr. Kezia H. Mkwizu, Dr. Jerita J. Mwambi, Prof. Eunice Fonyuy Fondze-Fombebe, Dr. Ajibola F. Oladejo, and Dr. Dumisani Hompashe

This proposed study aims to explore the contribution of institutional debates in creating lasting solutions to the cooking fuel change in East Africa. It underscores the critical role of partnerships between academic institutions and the private sector in promoting innovations that address challenges that affect clean energy transition. The study notes that while several clean cooking innovations have emerged, these have faced challenges, including the cumbersome registration requirements as well as issues related to patents. It recommends increased debates among stakeholders around issues of energy transition, incorporation of indigenous knowledge or home-grown solutions in energy transition debates, and increased government funding towards innovations in clean cooking energy.

Feedback from the reviewers:

While the proposed study presents very good percentages on energy access in East Africa, it fails to tailor local needs with home-grown solutions. The study needs to acknowledge the differences in comparisons between Europe and East Africa where, for instance, in the former the way gas is transmitted to households – which is in pipes – is different from the latter where gas is bought in gas cylinders. In addition, in Europe, a household can continue using the gas even without money, because of its extremely critical importance to survival as temperatures on the continent can drop to below 30 degrees Celsius.

There is need to expand the source of financing to support academic debates. While the conversations around energy transition are financially backed by the western world, they do not control / direct the narrative. In order to maximize resources – such as knowledge, there is a need for local institutions to develop partnerships with institutions in the global north.

There is a need for researchers to limit the patenting of their studies so that their information can be used by those who need it. The present researchers need to borrow a leaf from the founders of internet and the mRNA vaccine for COVID-19, whose contributions have shaped the global world years after their ground-breaking findings.

Title of Abstract: *Integrating the Resource Nexus Approach into Sustainable Livelihoods, Climate Change, and Energy Transitions in Uganda: Reflections from Sedentary Communities around Lake Wamala in Mityana* — By Baker Matovu

Matovu's paper seeks to examine the nexus between sustainable livelihoods, climate change and energy transition in Uganda and interrogate the interplay between the three elements in promoting development and improved livelihood outcomes. The paper reveals gaps by the actors to systematically link climate change vulnerabilities with food insecurity and energy, often resorting to siloed approaches to determine policy recommendations that are parallel with micro-level livelihood vulnerabilities and realities. The paper observes the overreliance on natural resources due to limited socio-cultural factors, better alternative livelihood sources and limited knowledge on alternative energy sources, and calls for systematic and inclusive practices that integrate community interests as well as clear policy or regulatory frameworks that promote better livelihood options.

Feedback from the reviewers:

The study presents a very good concept on the paper, but has a lot of rhetoric in place of hard data. The paper should provide hard data, with statistics, to strengthen the issues the paper explores.

The approach the paper proposes, the resource nexus approach, is good as it examines how resources are affected as people search for energy solutions.

While the proposed paper promises to use the resource nexus approach, it fails to unpack what the approach means, why it is used and its applicability to address climate change amidst energy transition, especially in light of the proposed energy policies.

Title of Abstract: *Gender Dynamics on Cooking Fuels, Energy Transition and Climate Change Mitigation: Perspective from Northern Uganda* — By Dr Mary Ejang

This paper aims to examine the gender dynamics underlying access to cooking fuels and climate change mitigation dilemmas in Lira City, Northern Uganda. It observes that while the Presidential Executive Order No. 3 of 2023 on charcoal ban is a good strategy for environmental conservation, it

however reinforces women's burden on the cost for cooking fuel as it doesn't provide alternative affordable clean energy source. Using a mixed method and cross-sectional design, the paper finds that gender-based inequalities influence household fuel choices and vouches for improved access to clean energy as this would potentially reduce the burden on women and address women's strategic gender needs.

Feedback from the reviewers:

The topic sounds good topic, but is very long. It can be improved by revising it to read as follows: 'Gender Dynamics in Cooking Fuels Transitions: Perspectives from Northern Uganda'.

While the paper provides frameworks, which are useful, such frameworks are not unpacked. For instance, how are the voices influencing energy transition? What changes do we see in terms of decision making between men and women? These elements need to be interrogated in the frameworks with hard data.

Furthermore, the conclusions lack evidence of the findings. There is need to link the conclusion to the findings.

Title of Abstract: *Determinants of Relevance for Adoption of Renewable Energy Interventions among Refugees and Host Communities in Terego District, Uganda* — By Denis Gobo, Alfonse Opiyo, Clement Okia, Christine Oryema & Justine Kilama

This proposed study seeks to examine the factors affecting the adoption to clean energy sources by the refugees and the host communities in Terego District and the perceptions of such groups towards clean energy technologies / innovations. Using the inclusive innovation systems framework, the proposed study seeks to interrogate how communities attach relevance to these interventions and the level of involvement of the marginalized groups in both policy development and implementation. It observes that despite efforts by Development Partners and the private sector actors to promote clean energy technologies, through providing trainings, financial support, and subsidies for clean energy products, there still exist constraints that hinder the adoption to alternative energy sources.

Feedback from the reviewers:

The proposed topic for the study need to be revised by replacing the words 'energy interventions' with the word 'technology' as the latter term is what is generally / commonly used.

The preliminary results explore various determinants such as technology, perceptions, etc. among the factors influencing the adoption of particular clean energy alternatives. The study should restrict itself to focusing on only technology related factors as these are widely known to limit energy transition, especially in developing economies like Uganda.

The proposed study needs to use the information gathered through employing the qualitative methods so as to enrich the quantitative method. The qualitative methods would help in contextualizing and explaining why particular technologies are the most preferred by a particular segment of society.

Title of Abstract: *Charcoal Production and Consumption, a Threat to Sustainable Forest Management in Tanzania* — By Greyson Z. Nyamoga

This paper seeks to examine the factors influencing the increased demand for charcoal production in Tanzania and the strategies to enhance / promote sustainable forest management in the country. Using the Partial Equilibrium Model, a model that analyses how supply and demand of a particular product interact in a specific market, the paper reveals increased harvesting of wood for firewood and charcoal, a factor attributed to high population growth, urbanization, and limited options of alternative energy sources for cooking. The paper observes that while charcoal and firewood trading and production have enormous economic benefits attached to them, in terms of providing employment and income to many people, its unregulated nature poses significant threat to sustainable forest management. The paper recommends the putting in place of alternative cooking energies, improving governance and charcoal trading systems, and enhancing sustainable forest management practices.

Feedback from the reviewers:

The paper presents a picture that charcoal production fuels deforestation, which highlights the need to shift away from the colonial narrative that forests cannot be used sustainably. As examples have shown, countries such as Ghana, Namibia and Malawi have debunked this narrative and charcoal is being produced sustainably. Tanzania has developed a sustainable charcoal model which introduces the formalization and institutionalization of charcoal through the charcoal production chains.

The paper perceives charcoal production to be the main driver of deforestation, which is a misconception. In fact, charcoal production is more linked to environmental degradation than deforestation because the charcoal producers are knowledgeable about the type of tree species that are good for charcoal making and therefore engage in selective cutting.

The author should consider making reference to a study that was conducted by Twene Mampamba in 2007, which explored similar issues that Nyamoga is proposing to research on. Twene's study predicted that by 2028, there will not be forests on public land if the same consumption patterns and the current management practices continue. Nyamoga's study would explore ways of building on that carried out by Twene.

Title of Abstract: *The Shift to Clean Cooking: Exploring Women's Perspectives in Climate Change Mitigation – A Case Study of Lake Zone, Tanzania* — By Dr Janeth John Mushi

This paper aims to investigate the factors affecting women's shift to clean cooking fuels in Lake Zone, Tanzania. Guided by the gender and development frameworks, the paper observes that women are disproportionately affected by charcoal and firewood use, with implications on their health and the

environment. The paper reveals the low adoption to clean energy alternatives by women attributing it to challenges of affordability, infrastructure, cultural norms, and information gap, and calls for empowering of women in energy-related decision making for the homes.

Feedback from the reviewers:

The paper categorizes LPG as clean energy, which is a wrong description and that needs to be adjusted.

The paper further stresses that women in urban areas have access to clean fuel and assumes that they are a homogenous group, which is a wrong assertion. These would potentially differ in terms of level of education, employment status, among other factors.

The paper also needs to take into account the gendered perspectives that manifest in households, where housewives use gas while cooking and the house helpers (maids) utilize charcoal in preparing meals. The paper also needs to acknowledge the fact that youth male and women have recently adopted the use of the new energy technologies.

The paper, in the methodology section, envisages involving key informants in the study. However, it does not list out who these key informants are. In addition, the study envisages using focus group discussions and survey. However, it does not provide any justification for using the two approaches at the same time. The author needs to provide a justification for using both qualitative and the quantitative research methods.

Title of Abstract: *Overcoming Barriers to the Adoption of Alternative Urban Energy Sources in East Africa: Evidence from Dar es Salaam City in Tanzania* — By Emmanuel Patroba Mhache

This abstract examines the underlying factors affecting the transition from biomass fuels to clean energy sources in Dar es Salaam, Tanzania and interrogates the strategies influencing the adoption to alternative energy sources. Using a mixed research approach of both qualitative and quantitative data collection, the paper reveals a high dependence on charcoal and identifies factors such as the culture of the people, low prices of charcoal, people's mindset and perceptions as affecting the transition to alternative energy sources. The paper recommends the subsidizing of prices on the alternative sources of energy so as to facilitate access to clean cooking fuels by the users.

Feedback from the reviewers:

The paper does not cite the Government of Tanzania's policy, which focuses on facilitating access to clean energy in areas that convene high populations such as schools, prisons, and refugee camps in what is known as community energy. The paper should explore the concept of community energy and examine how it is being applied in Tanzania, but also draw experiences from other countries.

While the paper acknowledges the fact that Dar es Salaam has a high population, which explains the increased use of charcoal and wood fuels in the area, it does not examine the implications that have arisen as a result of the recent relocation of civil servants from Dar es Salaam to Dodoma in regard to energy use. This impact could be evidenced by the increased depletion of the forest lands in Dodoma.

The paper should consider the fact households have adopted the approach of diversifying energy sources depending on the use. For instance, they utilize solar energy for lighting, charcoal for cooking, and electricity for preparing light meals.

Title of abstract: *Impact of Clean Cooking Energy on Women's Lifespans in Tanzania: Evidence from Autoregressive Distributed Lag (ARDL) Analysis* — By Jackson Bulili Machibya

This abstract examines the impact of adopting clean cooking energy and fuels on women's lifespans. Using the Autoregressive Distributed Lag (ARDL) model to analyse time series data from 1990-2022, the proposed study seeks to explore the short and long-term effects of clean cooking energy and fuels on women's lifespans and health outcomes while controlling for Carbon dioxide (CO₂) emission from manufacturing industries, literacy rate and health care variables. The paper reveals a significant positive impact of clean energy and fuels adoption on life expectancy in the short run while the long-term effects appear uncertain, with a no significant negative relationship observed. It recommends the need for targeted policies that promote clean energy solutions in households and industries, enhance healthcare access, and improve literacy rates to achieve sustainable better health outcomes and empower women to participate fully in socio-economic development activities.

Feedback from the reviewers:

While the paper primarily focuses on the impact of cooking fuels on the lifespan of women, it is important for the author to provide a justification of why the study is restricted to examining the effects of clean energy on women's lifespan, and not on either men or both men and women. The justification of why the study restricts itself to women would enable the readers appreciate the situation of the women in the charcoal economy, which necessitates the paper's focus on them as a case study.

C. General comments by the reviewers

Generally, there is a need to contextualize the terminologies borrowed from the global world and link them to the local perspectives, which is the main topic of the seminar. While studies indicate that 95% of the households use biomass, it is important to examine what this statistic means in terms of energy transition. In addition, it is wrong to assume that all the 95% households need to transition from biomass use to green / clean energy. It is also wrong to assume that green energy is an alternative to biomass, without taking into account the quantity of biomass that is used per day and whether the available energy options can effectively meet the needs of the available population, in addition to the cost of such alternatives.

There is need to cautious in making straight line comparisons, which have a tendency to mislead researchers. Citing comparisons between Uganda's energy use and the rest of the world, it was noted countries like Russia, for instance, have places whose temperatures lower to about -50 degrees centigrade, and therefore require a lot of energy to support rearing of chicken, goats, cows to survive, compared to Uganda.

The proposed papers need to contextualize energy transition to the local perspectives to avoid a tendency of following the international discourse around energy transition, especially for developing countries which rely on others.

It is also important to acknowledge the changing gender roles in social life. A study conducted in Adjumani and Luwero by one of the reviewers revealed that the men usually step in and take on roles perceived to be predominantly a woman's work, such as fetching water or firewood, in times of scarcity.

While many papers make reference to several theories / frameworks, they however fail to unpack those theories and to contextualize them to their studies, and as well fail to demonstrate their applicability to their work.

1.3 Closing Remarks

The seminar was closed by the Prof. Robert Wamala, the Director for Research, Innovations and Partnerships at Makerere University, who in his remarks expressed gratitude to the authors for their engaging contributions. Prof. Wamala observed that the subject of cooking fuels is no longer a peripheral issue but one that is central to the grand challenges facing societies today. He noted that the seminar was in line with two focus areas of Makerere University's research agenda, which are: 1) Natural resources management and climate change, and 2) Agricultural transformation, food security and livelihoods. Prof. Wamala further stressed that the themes covered during the seminar highlight the implications that arise from the energy choices that the society makes, and urged policymakers to make reference to such evidence-based materials in policymaking processes. He extended appreciation to the project partners: HURIPEC, CRIC, and SAUTI for the partnership and collaboration and pledged the Directorate's support in creating a pathway to ensure that the seminar outputs influence policy at multiple levels.



Dr. Zahara Nampewo making her presentation at the Seminar Prof. Robert Wamala making closing remarks at the conference



Prof. Opportuna Kweka providing feedback to some of the papers Dr. Emmanuel Lwankomezi presenting his paper

