Promoting Inclusive Clean Energy Transition in Uganda. Evidence, Challenges and Policy Options

Policy Brief

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Executive Summary

We have studied people's perceptions of cooking energy systems in Uganda, through a document review and Focused Group Discussions (FGD), their level of knowledge about the possible effects of using energy systems, the challenges they face when using various energy systems, and their suggestions for promoting the use of clean energy. During the FDGs, men and women were engaged separately to allow for independent responses across genders. This policy brief documents an overreliance on biomass across the country with charcoal being the major energy source in the low-income suburbs of Kampala. Evidence also points to the inherent fear of electricity and liquid petroleum gas (LPG), weak awareness, and poor regulatory systems to be the leading obstacles to an energy transition process.

Introduction

Over 840 million people across the world have poor access to electricity which partially limits their transition to clean energy. Close to 3 billion people rely on traditional biomass (fuel wood, dung, crop residues, etc.) to meet their energy demands. However, using biomass has several detrimental effects including affecting household livelihood, child schooling, labour market participation, and environmental quality. In Sub–Saharan Africa (SSA), over 70% of the population has no access to electricity, and

KEY RECOMMENDATIONS

- (i) There is a need for strict regulations against tree cutting and transporting of charcoal.
- (ii) Penalties are needed, especially for government officials who deal in charcoal business as well as those involved in transporting it.
- (iii) The government should support citizens for instance by subsidizing LPG cylinders and reducing the power tariffs to improve their affordability.
- (iv) The population needs to learn about the benefits of clean energy. This should eliminate the inherent fear that electricity and LPGs are expensive and health threats.
- (v) A phased implementation of clean energy programmes should start with urban areas that have access to electricity.



where it exists, its price tends to be unaffordable, especially for poor households. This has led to over 900 million people in that region continuing to depend on fuel wood for cooking. In Uganda, biomass is the predominant energy source with over 85 percent of the population using firewood and 13 percent using charcoal for cooking. This is partly because of limited access to electricity and the inherent fear of it being expensive especially if used for cooking. In this, policy brief, people's perceptions about the existing cooking energy systems in Uganda, their level of knowledge about the possible effects of using energy systems, the challenges they face when using various energy systems, and their suggestions for promoting the use of clean energy are highlighted.

Data and methods

A document review and Focused Group Discussions (FDGs) are used as data sources. The reviewed documents include scientific papers, performance reports from various government institutions, and action plans. In the FDGs, data were collected from four group discussions held in December 2023 in two suburbs of Kampala city (Katanga and Kasubi market). These areas were selected to represent the low-income earners and to provide a better understanding of the energy transition process starting from the bottom left corner of the energy transition ladder that portrays the prevailing situation of Uganda's energy consumption. There were 42 participants in the FGDs, the men were on average 45 years old, and the women 42. Men and women were in separate groups.

Key Findings

Evidence from all data sources reveals that energy users in Uganda can be grouped into three categories. The first category mainly uses biomass, especially firewood and charcoal. The second category uses modern energy including electricity and Liquified Petroleum Gas (LPG) and the third category uses a mix of biomass and modern systems. The data obtained from FGDs suggests that all participants use charcoal (100 percent of the respondents) and charcoal briquettes with a small number of respondents using firewood, kerosene stoves, and electricity during cooking. The use of electricity for cooking was mainly reported by men (10/22 against 5/20 women). Although firewood is the main energy source across the country, many respondents from FGDs said they don't use firewood because of the limited space (small houses with no cooking location) in their congested residential areas. The respondents pointed to the weak regulations against the use of biomass and the weak enforcement of the existing regulations related to tree cutting. In addition, there was a poor awareness of the dangers of biomass and the potential benefits of using clean energy.



Picture 1: A group of women during the FGD.

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