

GOLD VI

**Case-Based Contribution
to Chapter 7: Renaturing**
*GOLD VI Report on Pathways
to urban and territorial equality*

Community based

Production of Waste-Based

Energy, Kampala, Uganda

In partnership with:

Produced by:



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AUTHOR(S)

Teddy Kisembo, Judith Mbabazi and Paul I. Mukwaya

ORGANISATION NAME

The Urban Action Lab, Makerere University

CITIES/COUNTRIES IT COVERS

Kampala (Uganda)

CHAPTER

7: Renaturing

SUMMARY

This case-based contribution explores the experiences, opportunities and challenges of community-based organizations undertaking briquette production and their contribution to improving the poor urban livelihoods in Kampala. Kampala, the biggest, commercial and political capital city of Uganda, generates over 1500 tons of waste per day, 80 percent of which is organic matter. Of the generated wastes, Kampala Capital City Authority can only collect and dispose off between 40 – 50 per cent of the wastes. Energy briquettes made from organic waste present a plausible alternative to wood fuel and charcoal. However, even with the rising demand for cleaner cooking energy like briquettes, their production, general acceptability and use still remain at micro level. To augment innovative waste economies that enhance urban livelihoods in informal settlements, the KNOW Kampala project, is being implemented by the Urban Action Lab, Makerere University and its partners ACTogether and LUCHACOS, so that access to clean cooking energy for inclusive urban development in Kampala can be scaled up. The focus has been placed on local level community led initiatives using the ‘opportunities’ creation approach’ to explore demonstrable strategies for the transformation of waste management in the city.

Introduction

With a population of over 1.7 million in **Kampala City** (Uganda), increasing at an average rate of 4.03% per annum,¹ the city generates an average of 1500 tons of waste produced every day.² The key biomass products include food, charcoal and wood whose use in the city has adverse impacts on nature and climate.

Kampala Capital City Authority's (KCCA) approach to solid waste management is hinged on a **public private partnership** (PPP) mechanism. Several evaluation reports about the approach in the city consider it environmentally unfriendly and costly to both KCCA and urban poor communities, which requires redress. This underscores the importance of effective and sustainable waste management systems across the city region. Alternative means of waste management are not only likely to reduce waste management costs, environmental impacts but also provide alternative sources of income to the urban poor, despite the fact that they still lack a supporting policy and legal framework. With over 60% of the population considered as poor in Kampala City, the KNOW Kampala project was designed to: (1) co-produce knowledge on how to identify



Community groups in a capacity building training on business proposal writing
Source: Ian Plakker

and ignite pathways for harnessing the urban waste streams for small and medium enterprises that could integrate the poor segments and vulnerable communities into the urban economy;³ and (2) investigate ways in which knowledge co-production can be used as a methodology for transformative urban policy. Using a Community-based Approach (CBA) the project is implemented in the densely populated informal settlements of Bwaise, Masanafu, Namungoona, Kasubi, and Nakulabye, all in Lubaga and Kawampe divisions,⁴ with capacity building being the central overarching theme in the energy briquettes value chain to scale up briquettes production.

Community Capacity Building for Energy Production

Despite the clear potential demand for **energy briquettes** in the city, many groups making them are still producing at a micro-level and therefore unable to meet the rather slow but growing demand for alternative, greener energy. Makerere University with its partners ACTogether Uganda, and Lubaga Charcoal Briquette Cooperative Society (LUCHACCOS), are working with seven community groups in the city with an aim of enabling societal change and transformation through

knowledge exchange. To build the capacity of the groups in energy briquette making, the project has provided a **seed grant** that is a combination of **skills training** in product development, business planning, financial record keeping, branding and collecting marketing; and **briquette making machines** (a set of all four machines that includes a carbonizer, mixer, crusher and press machine) to each of the seven groups.

1. KCCA, "Statistical Abstract for Kampala City", Kampala Capital City Authority, Kampala 2009, <https://www.kcca.go.ug/media/docs/Statistical-Abstract-2019.pdf>.

2. Water Aid Uganda, "Solid Waste Management Arrangements and Its Challenges in Kampala: A Case Study of Bwaise II Parish, Kawempe Division", (Kampala, 2011).

3. Shuaib Lwasa et al., "Multi-Stakeholder Engagement and Learning Experiences of Energy Briquettes through a Business Model", Knowledge in Action for Urban Equality (KNOW) | London, 2020, <https://www.urban-know.com/post/kampala-learning-experiences>.

4. Shuaib Lwasa, Teddy Kiseembo, and Judith Mbabazi, "Augmenting Innovative Waste Economies to Enhance Urban Livelihoods in Informal Settlements for Inclusive Urban Development in Kampala: Co-Production of Knowledge on the Energy Waste Nexus" (Kampala, 2019).

The success of the capacity building effort took advantage of the kind of local level community organization that is found in the informal settlements. This was based on the premise that co-producing the knowledge with communities themselves and partners that have more established groups elsewhere enable a spiralling of knowledge and action to business start-ups

towards **integrating the urban poor into the urban economy**. Many residents in informal settlements coalesce around loose forms of savings and self help groups. Most of the community skills training activities took advantage of the village savings and loan schemes; an initiative that is built on the structure of the National Slum Dwellers Federation (NSDF).



Exodus group receiving their equipment
Source: Ian Plakker

Lessons Learned

The Solid Waste Management Model based on the conventional approach of **collect-transport-dispose** in Kampala City needs transformation to recognize the value and potential of energy briquettes whose source material will continue to flow into the city.

Waste can kick start a **circular urban economy** that can contribute to equity and a transformation that promotes waste economies. Moreover, circularity can be financially and environmentally beneficial to the urban authorities through thriving on costs of solid waste management. Many community groups formed around a clearly defined objective of improving wellbeing in informal settlements require stepped up skills in various fields including business development.

Because groups have different levels of expertise and skill-sets, a model of co-producing knowl-

edge that allows advanced groups to train other groups, and reduce expert-based training, is recommended.

Regarding gender, **women came up the majority of the members in these community groups**. Mainly because women have de facto been made responsible for managing waste and cleaning the environment at household level. As disposal of waste is one of their daily activities, they appeared as the ideal beneficiaries of the briquette production. Even with the groups that have gender sensitivity, it's the women that were the initiators of the community briquette groups.

Challenges

Despite co-production coupled with peer learning across groups, the application of the skills is still limited and thus a model for **continuous skilling** is important to address this challenge.

A challenge can be the **mindset and attitude** of the groups: out of the 15 groups that were at the project inception, only seven remained owing to the normalized 'quick fix' attitude that characterizes group formations in and around informal settlements in Kampala.

Absence of legislation backing up community initiatives in solid waste collection and recycling is a common problem. For example, the National Planning Authority doesn't recognize the role played by community briquette groups, instead emphasising on large scale briquette enterprises.

Having sufficient space to dry the waste and briquettes is too often another limitation in production in informal settlements although to maintain continuous production, a drying area of at least three days output is needed.

Finally, they can be institutional and mindset barriers. Although the revised National Environment (Waste Management) regulation 2020 articulates the sustainable pathways of waste management and the opportunities thereof, institutional and citizenry focus has not shifted. **Biomass has received little recognition** both in terms of funding (there is more willingness by the government to invest in electricity and oil exploration rather than biomass) and lack of a concerted policy (enforcing efficiency in production and use). The institutional and regulatory framework of the biomass sector is scattered amongst various government agencies, lacks cohesion and clear mandates.

Conclusion

There are not many urban activities that bring together city institutions, urban practitioners and the citizens. However, despite their complexities, multiple stakeholder engagements through initiatives like the KNOW Kampala project, are beginning to yield recognition. During engagements, there is recognition of what different stakeholders can bring to the table in terms of actionable ideas that are transformative to urban development.

The main stakeholders in briquette consumption and distribution are households and community-based organizations respectively. Therefore, key national actions like waste management policies to favour locally-led initiatives, and the provision of finance and other support to small organisations. This approach will generate immediate social and economic benefits, including more secure livelihoods for the urban poor, the capacity to expand waste collection services to more households and, ultimately, healthier urban environments and urban residents. Community based organisations and small enterprises have emerged to fill gaps in service delivery like waste management. Therefore, urban policies should engage with the lived realities of the urban poor namely informality, poverty and a shortage of public funds.

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In particular, the present paper has contributed to Chapter 7 on “Renaturing”, which focuses on the governance and planning of nature-based solutions, with specific emphasis on decoupling economic development and resource use, the transition to net zero carbon systems, risk reduction and urban resilience. The chapter explores how local and regional governments can promote approaches that advance these goals, placing the needs and priorities of structurally discriminated social groups at the core of their actions, and contribute to urban and territorial equality.

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