

CLEAN COOKING

The missing conversation around clean cooking

Grace Mbungu and Daniel Kammen

The challenge of providing clean cooking energy services to the over 2.7 billion people and the 850 million or more without reliable electricity services worldwide is a daunting challenge. However, this is a battle that must be won, with no one left behind. The failure poses enormous burdens and risks to human livelihoods and general wellbeing. For example, the health impacts of exposure to indoor and ambient air pollution resulting from the production and consumption of biomass and fossil fuels is known to be the largest driver of the burden of disease worldwide. Moreover, the unsustainable production and consumption of biomass and fossil fuels undermines the achievement of the UN Sustainable Development Goals (SDGs), and climate change mitigation efforts underscored in the Paris Agreement.

While there is progress in this campaign, efforts to date have remained largely technocratic and often simplistic. This is perhaps no surprise given the excitement and potential that improved cook stoves, lower and lower cost of solar panels and other energy related technologies have shown in other parts of the world. However, technological stand alone approaches are often ignorant of the complexity of energy access challenges, especially the individual and contextual factors that limit their acceptance and effectiveness, especially in poor and marginalised communities.

The trap of singular approaches to energy challenges

When it comes to designing energy access solutions for the poor in the Global South, singular and often disconnected opportunities are presented or highlighted. For example, the current energy access discourse has electricity access in one box and cooking energy access in another different box. Rarely are these two processes seen as connected and complementary. However, singular approaches present a missed opportunity no amount of technological innovation could solve. Instead, such gaps warrant a holistic understanding of the challenges and opportunities within local contexts, as well as strategic approaches to account for the diversity of needs and to take advantage of available opportunities.

Multiple and diverse needs

Energy needs are not sought in isolation, and can therefore only be understood and addressed in the broader context of other unmet and emerging needs.

However, while current cooking energy solutions address important environmental and climate change goals, they underestimate the struggles faced by households in many parts of the world to achieve broader individual and social needs. In the end, however, end-users have been known to prioritise immediate and existential needs and not the astuteness of a technology itself. The reality is that immediate and existential needs are not in conflict with the need to protect the environment and mitigate climate change. However, acceptable and effective energy solutions calls for honest reflections on current and past interventions, collaborations with all relevant stakeholders, and a depth of research that has been lacking, especially in the cooking energy access discourse.

Energy production and consumption are inherently human and societal affairs

While technological development is primarily a scientific endeavour, the individual and social acceptance, demand drives, and access dynamics are social and contextual in nature. For example, despite the Kenyan government effort to regulate the production and distribution charcoal, its dominance in both rural and urban areas has become difficult to unsettle. This is strong evidence that clean cooking and climate energy solutions are not only about technological development or progressive and climate friendly policies but instead are also about having a willing and able coalition on the ground to implement them.

Design and implementation of energy access solutions

Whereas the development of cooking energy solutions has been predominantly dominated by technocrats, their implementation has also been dominated by external aid and charitable organisations. At the local level, men, often not involved in cooking activities within the household, dominate the sector as energy service providers. We see this image often: a room full of women and children, a man is on stage demonstrating the use and value of biomass improved cook stoves.

The importance of involving first-hand users as the face and voice of change processes was demonstrated by the BBC news in a story on the Water Wise women initiative in Jordan.. It showed that despite the efforts by the government to address water waste from leaking pipes, progress was only made when women got involved in the process. The engagement



© Ninara / The current environmental and housing conditions in Kibera makes it difficult for clean cooking solutions to be effective.

of women as water stewards was crucial because they were the primary water users within the household and hence knew best where the leakages were, which saved time and human resources. An added advantage was the empowerment of women with income generating activities and financial independence to address other everyday needs. Hence, the empowerment of women as producers, consumers and custodians of cooking energy services can prove instrumental in the cooking energy access processes, because it has the potential to generate interest among women beyond the household circles, improved service provision, and empower women with skill and income-generating activities needed for the sustainable access of clean cooking energy solutions. Hardware lessons are often country and region specific, but the need to empower both stove suppliers and end-users to create useful stoves and viable economic and distribution models for stoves that people truly want is the goal of virtually every local to global organisation and agency.

Use context, in-built conditions, and immediate living environments

The ultimate goal of pursuing universal access to affordable, reliable, sustainable energy is to improve the quality of life and general wellbeing of current and future generations. While technological improvements play an important role in meeting these

objectives, their effectiveness is limited if implemented in inappropriate social and environmental conditions. For example, it is difficult to imagine how the use of biomass improved cook stove (ICS), or any clean cooking energy solutions, could be effective in enhancing health and general wellbeing of the residents of Kibera, under the current environmental and housing conditions. Overall, these examples demonstrate that technological-only focused energy access solutions and simplistic development approaches are unfit for addressing the ever-evolving energy and other complex global challenges. ■

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