



Awardee: University of Liverpool

Project Title: Bringing eCooking to Cameroon – A pilot study of an off-grid consumer solution to address barriers to adoption

Building from previous MECS funded research in Cameroon, they propose a pilot project to test a new eCooking ecosystem. Previous research found little or no use of eCooking with barriers including ongoing costs of electricity, unreliability of supply (frequent outages) and no immediate plans for investment in infrastructure by the government. This product from their industrial partner, AGreatE, decouples eCooking with grid provided electricity by using an off-grid approach.

AGreatE's off-grid eCooking ecosystem addresses barriers of on-grid eCooking. The off-grid design offers an option for African households that cannot access reliable electricity at a time when governments in the continent are seeking to scale adoption of clean cooking for health, environment, gender equality and the planet. The ecosystem consists of a battery station, solar panel, and DC cooking appliances.

The proposed pilot will install the eCooking ecosystem in 10-15 households for 3 months in rural communities in MBalmayo, Cameroon. The community are well sensitised to clean cooking and health research and the proposed villages are exclusive users of biomass fuels with no access to on-grid electricity for cooking. The proposed study is a mixed-methods project including impact assessment of air quality (PM2.5 and CO), cooking behaviour, fuel/ cost savings and other outcomes from adoption of eCooking.

The pilot will assist AGreatE to understand costs of implementation of the solution at scale. The pilot will be exploring:

1. Optimum battery size
2. Requirements of DC cooking appliances
3. Options for funding (e.g. through pay-as-you-go, results-based finance, etc)

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