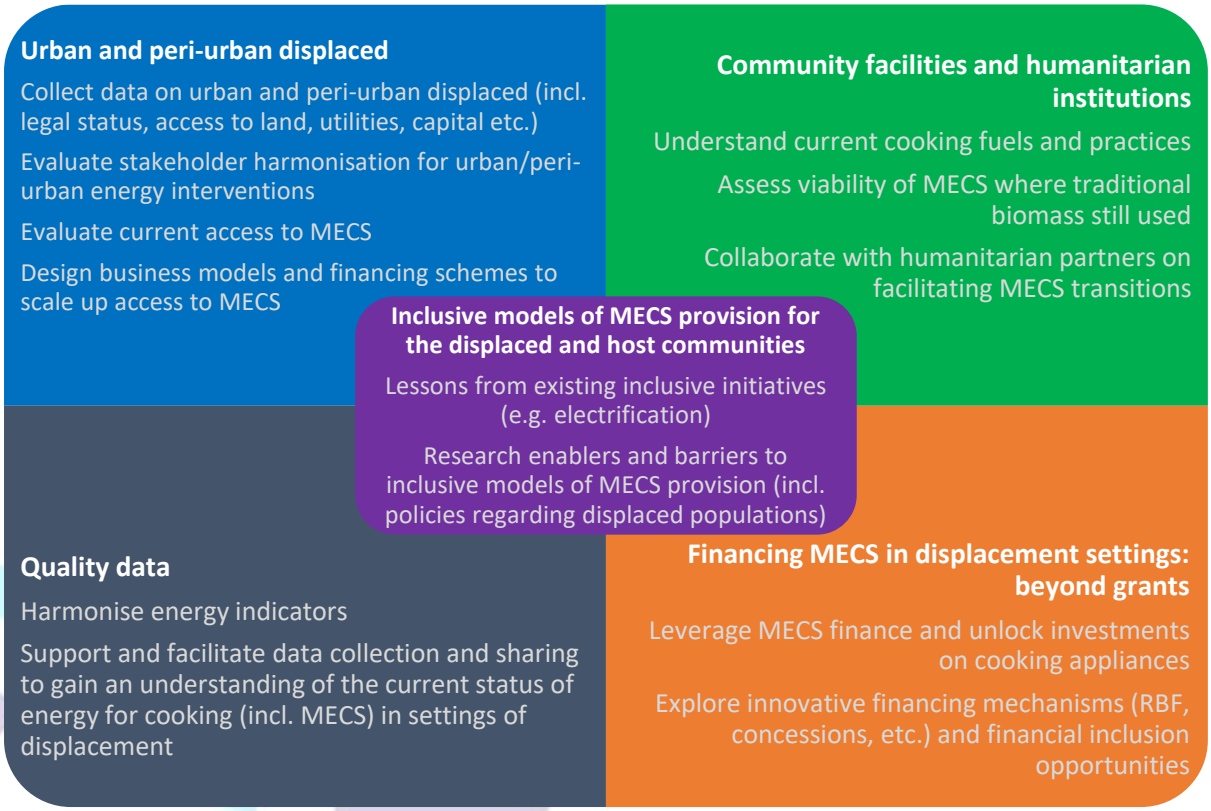
MECS Humanitarian: A Stakeholder Consultations Report.

Authors: Bisaga, I. and To, L.S.

February 2021.

This material has been funded by UKAid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.

In December 2020, the humanitarian stream of the MECS programme held two stakeholder consultation workshops: the first one with the MECS team members and partners, and the second one (co-hosted with the GPA) with the wider humanitarian energy community. The goal was to discuss the recently released "Landscape Analysis of Modern Energy Cooking in Displacement Settings" *report with the focus on the strategic priorities identified for the humanitarian stream. The workshops also offered an opportunity to better understand who would be interested in partnering and collaborating under the 5 research themes identified in the landscape analysis:*



Research needs for modern energy cooking services in situations of displacement.

The discussions facilitated in breakout groups centred around questions on the opportunities and barriers for MECS in displacement settings, themes or areas that seemed to be missing from the identified priorities, as well as ways to create and strengthen synergies with the existing MECS streams and activities led by other stakeholders and partners. Further comments were received via email and one-to-one meetings from those unable to attend. The sections below summarise the workshop discussions and comments received.

Urban/Peri-Urban Displacement

Data on the displaced in urban and peri-urban areas is inadequate. While some sources suggest that approximately 75% of all displaced people live in these areas[1], there is a limited evidence base that provides insight into their energy situation and context. Despite the limited availability of data on the displaced and their location in urban settings (they tend to be dispersed rather than concentrated as is the case in refugee camps), MECS have an opportunity to benefit from the ongoing projects to understand what energy services the displaced access and on what terms. An example could be the work carried out under Renewable Energy for Refugees (RE4R) in Jordan, led by Practical Action and Chatham House, and the urban displacement work of the Norwegian Refugee Council (NRC). Communal or institutional cooking (including e-cooking) in those settings might also be a good opportunity given the higher access rates to the electrical grid and a substantial spend on cooking fuels when providing meals at scale. It is also worth noting that challenges in urban and peri-urban areas might be different. For example, cooking with biomass is harder as wood and charcoal are not always available. Alternatives include LPG which can be too expensive for low-income households, or electricity where a connection is available. There are therefore opportunities to develop business models to boost affordability of LPG and highly energy-efficient cooking appliances to speed up urban transitions to MECS. These models could benefit from lessons learnt in the PAYG electricity sector and remote monitoring technologies for data collection and payment automation.

Among the key barriers is the uncertainty of grid connections at a household level: it might not be there at all or, where a connection exists, it might be unstable/of poor quality or illegal. This is often the case in households located in an informal settlement, for example. Energy subsidies, even where they exist, frequently do not apply to those living in informal settlements. Infrastructure provision can also be limited due to the (perceived) temporary nature of these settings. Another challenge associated with the status of the displaced is that if they are undocumented, identifying them in the urban landscape might pose a risk to them and their security. Cultural aspects of cooking have also been explored superficially to date. Lack of rich data on cooking practices poses a barrier for transitioning households to e-cooking or other modern fuels.

In the planned activities, MECS humanitarian should ensure that supply chains to get cooking devices to the displaced in a variety of locations are examined. Additionally, transitioning the displaced populations to MECS will have to be done in a way that considers what happens after they return home (when/if they do), as well as host communities. Otherwise, the impact might be not only short-term but also unequitable.

It is recommended that MECS humanitarian collaborate with other researchers interested in the urban contexts, including the MECS urban stream, RE4R, NRC, UNDP, UN-Habitat, FCDO's Cities and Infrastructure for Growth (CIG) programme and ODI. At a practical level, MECS should aim to learn from the services that are already provided to the displaced in urban and peri-urban settings.

[1] ODI (2016) 10 things to know about refugees and displacement. Available at: https://www.odi.org/sites/odi.org.uk/files/resource-documents/11168.pdf

Community Facilities and Humanitarian Institutional Settings

In the consultations and in this report, we refer to community facilities as health centres, educational facilities and community spaces such as churches, community halls etc. Humanitarian institutions, on the other hand, include humanitarian public/administration offices, accommodation buildings for humanitarian staff/compounds, warehouses, offices, and Cluster Coordination Response Model (CCRM) facilities.

While urban settings offer more opportunities for e-cooking than rural or camp settings, partnerships with mini-grid providers could be explored for the testing of EPCs in the latter two. Getting governments' buy-in and advocating for electric utilities to install transformer-guarantee cooking loads[2] in areas/facilities reached by the grid could be another way of facilitating transitions to modern energy cooking. For example, this is currently being explored with Kenya Power in WFP-supported schools. An advantage in community facilities and humanitarian institutions is that menus might be more limited or more predictable (i.e. mostly the same foods cooked every day) making the move to e-cooking easier. As loads might change over time (decrease if facilities get phased out or increase if the capacity needs to be boosted due to more displaced arriving in the location), the solutions should be flexible and modular in their design. Energy efficiency measures should be built into the offered solutions and models. Humanitarian institutions or community facilities transitioning to MECS could also act as anchor clients to encourage investment in off-grid or on-grid electric cooking or to help convince utilities to support e-cooking. Another opportunity not to be missed is the distribution of any spare available electricity (at the community/humanitarian facilities) to the communities to support electricity access and potential uses of electrical appliances for cooking. In areas with no grid connection, LPG could be the better option to explore as a short-/medium-term solution. There are also opportunities to impact jobs creation by involving the displaced in activities such as maintenance in contexts where the displaced people can perform paid labour.

MECS have been shown to be cost-effective when considered over the long term. However, displacement settings, while often turning into protracted crises spread across several years or even decades, continue to be seen as temporary with limited long-term commercial opportunities. Hence, the question is what can MECS achieve in the short-term and how/where can it demonstrate long-term viability? Additionally, camp authorities might not be prepared to go with small trials as it might be seen as discriminatory and insufficient to provide enough coverage. Among other barriers are issues around the socio-political contexts of displacement and the various competing interests that exist among different humanitarian and non-humanitarian stakeholders operating in displacement settings. Energy access was perceived by a number of stakeholders to sit lower on the agenda of humanitarian organisations' than other needs. Lack of or limited financing, lack of tested business models, weak or non-existent supply chains, little or no local capacity, and lack of or few policies supporting the switch to modern energy cooking in humanitarian institutional settings make it challenging to trigger meaningful narrative change.

In order to ensure more synergies, getting communities involved early on (from conception to implementation and beyond) through training, consultations and active participation is critical. Shifting mindsets among

[2] Where the electrical system is designed for non-cooking loads, there might be limitation to supporting the addition of electric cooking loads. Transformer-guarantee cooking loads would ensure sufficient power capabilities of the local distribution transformer to support electric cooking devices.

agencies such as WFP so that energy access is tackled alongside food provision (the mantra of 'no food without energy for cooking') has the potential to not only create more synergies but also create a more systemic change where energy for cooking is integrated into other interventions. Finally, building on existing programmes could help speed up the shift. For example, agriculture-focused projects could help feed into the production of biogas.

Finance

There is a chronic underfunding of cooking programmes in displacement settings. Energy and indeed other critical services in displacement settings have historically been heavily reliant on grant-based funding. However, grants are limited in time and scope and typically cannot support interventions beyond their agreed timeframes.

Non-traditional financing mechanisms should be explored, including blended finance. For example, philanthropic crowdfunding and carbon and development impact finance which have been an emerging area for metered cooking solutions (such as LPG, biogas or EPCs). For example, GSMA are looking into how we can log smart data from different forms of fuel devices and how we can use that data for impact funding. MECS are actively working with a number of partners on health, environmental and gender-impact metrics for carbon financing by demonstrating how usage of different stoves can reduce black carbon emissions and free up women's time. Pay as you go (PAYG) models with the use of mobile money could be important vehicles to facilitate transition to those solutions, particularly given the flexibility they offer to the often cash-strapped end-users. Remittances could also play a role given their volume (which could be affected in 2020 due to the impact of COVID-19). Other finance options, such as Results Based Financing (RBF) and traditional investments could prove promising in supporting early movers to enter new markets.

Affordability and the long-term viability of energy services should be carefully considered. The focus of future work should also include manufacturers and service providers to understand what type of low-cost financing could work for them, as well as to learn more about their customers (willingness and ability to pay, personal preferences, etc.). Additionally, as many providers are hesitant to set up operations in displacement settings, it will be critical to demonstrate the viability of those markets. Exploring which organisations are willing to loan to companies wanting to enter such riskier environments or able to secure the upfront capex of providing MECS in displacement situations will be a helpful guidance for the private sector. Drawing on lessons learnt in the development sector or tapping into the development sector's funding opportunities (by shifting the narrative on displacement settings) could prove impactful in the long term. Another avenue for maximising impact is using a holistic approach where cooking and other needs are pooled together to determine what financing could work best to address them jointly.

It is recommended that MECS work with partners such as GOGLA and IIED on end-user and other types of subsidies, and with the private sector at large to learn from success stories and schemes.

Quality Data

As energy access has historically fallen outside of humanitarian organisations' mandates, data on the subject in displacement settings has not been collected systematically or at all. A clear message emerged from the consultations: data is what we need yet data is what we lack the most, under all of the explored themes. There are several opportunities for the MECS programme to contribute to the data efforts. Among them:

- Understand the impacts of MECS for the displaced on local/host communities (e.g., questions around fuel prices and availability; conflict; equity)
- Data on the use of MECS after projects end: what happens beyond projects' lifespans?
- Use of IoT solutions for data collection to complement more traditional methods such as surveys and self-reported data on fuel use/consumption
- Use of social science methods to gather more qualitative data in addition to quantitative insights (e.g., ethnographic methods)
- Conduct a cost-benefit analysis of different modern energy cooking technologies in different displacement contexts.

However, some of the challenges might include the availability of quality modern energy cooking monitors and access to the displaced populations as a result of COVID-19, which might require a shift in how data can be collected (e.g., going through more intermediaries rather than directly from the displaced) and additional training to ensure that the collected data is of good quality. The MECS team should also be mindful of not exacerbating research fatigue among the displaced. Through sensitisation and early engagement, it will be easier to get their buy-in and demonstrate the importance of any given activity.

Recommendations for the MECS programme are to seek a diverse range of settings, including more challenging ones to avoid biased samples and lessons learnt as the preference is typically for easy-to-access areas which reduces opportunities for learning, and to develop research programmes in collaboration with relevant partners. Collectively developing a Theory of Change could provide an indication for what data is most needed. In addition, working towards the creation of core indicators that support the connection of MECS with SDGs could offer a long-term impact as other partners start or continue to work on promoting and implementing MECS. For standardisation purposes, energy indicators developed by the GPA and Chatham House are a valuable tool promoted widely among humanitarian energy stakeholders. Academic partners also play an important role in supporting the sector by helping make sense of the available data for decision making based on evidence. Finally, packaging data and insights stemming from complex datasets in a way that is accessible and useful to government stakeholders, donors, funders, energy experts and the wider humanitarian energy community will help demonstrate the real value of quality data.

Inclusive models of provision

Affordable, reliable, sustainable, and modern energy for all is essential to sustainable development and effective humanitarian response. This cannot be achieved, however, without an active inclusion of different groups, particularly those most marginalised: women, youth, the elderly and the disabled. Additionally, in displacement settings, the inclusion of host communities should also be pursued. Not least because there are co-benefits to

be reaped by targeting both the displaced and the host communities, but also because they tend face similar energy access challenges.

Transitioning host communities to MECS presents an opportunity to include the displaced people in energy access. Promoting the inclusion of the displaced in energy access programmes, national policies and RBF schemes could help achieve that. This should be in parallel with the intent to include host communities when designing MECS projects/interventions targeting the displaced. Effective communication and coordination will be key to ensure these two can maximise the potential co-benefits and streamline efforts.

Practical tools that could be tested include cash vouchers and existing models such as PAYG which has been gaining a lot of traction in the cooking sector, building on the successful application in the decentralised access to electricity. These can support access to a range of services and thus address the needs of the displaced people more holistically.

Among the challenges are the lack of electricity access in remote areas, as well as the continued lack of focus on energy among many humanitarian stakeholders (although the trend is slowly changing). Another challenge is the identification of the right technology for the context and the local needs and practices. Not only is a careful cost-benefit analysis needed, but also the true implications of any solution for the environment and the local economy. For example, if a cooking fuel is very carbon-intensive to manufacture, the environmental impact might still be negative despite reducing emissions of households' cooking activities. Even once identified, the cooking solutions might not always be available. Understanding existing supply chains or costs associated with the establishment of new ones is critical, as is working with local and national governments, and energy technology providers on developing mechanisms to support energy technology supply chains for the more challenging settings, such as refugee camps. Engaging with the private sector to learn how best to support them to overcome key barriers they might face will help boost markets for clean energy technologies, and make them more accessible and affordable to the end users.

Ability to pay for cooking fuels remains among the top challenges for the sector. The prevalent lack of rights to work results in a nearly complete reliance on aid assistance among refugees, with even the cheapest clean cooking solutions beyond their reach. Energy for cooking should be supported alongside food distribution programmes to make them effective. Too often displaced people have food rations they are unable to prepare because of insufficient cooking fuel or difficulty in procuring it (whether through collection or purchases). The design of food programmes should therefore be inclusive of energy with cooking energy making up an integral part of the approach.

It is recommended the sector moves away from siloed thinking that separates electricity from energy for cooking, as well as humanitarian from development approaches. It is critical to be mindful of providing fair treatment to both the displaced and host communities. The voices of the displaced people should be included in project/programme design from the start, meaning that there is a need for tools for inclusive approaches to be embedded in any research, design and implementation activities. Looking at access to energy for cooking alongside other services or sectors, such as healthcare, electricity, livelihoods, can be an effective way of facilitating inclusiveness and for maximising impact. Working with groups such as the Camp Coordination and

Camp Management (CCCM) cluster on issues around sustainable site planning, connectivity and energy access could help strengthen the linkages between different needs and services, and build new ones. For meaningful and long-term inclusion, getting the buy-in from governments presents the highest potential if the displaced are included in the national policies on energy access.

Other considerations

In the course of the consultations, a few other points emerged. Firstly, there is an ongoing debate about the sustainability of fuels such as LPG or electricity generated from non-renewable sources. While the goal is to ultimately achieve 100% renewable-based energy for cooking, LPG and non-renewables-based electricity can act as transitional fuels in the short to medium term but we should consider them with caution for their long-term viability, particularly from the environmental point of view.

Another issue revolves around the financing of modern energy cooking, sustainability and inclusive approaches. The important question is: if we provide food distribution to the displaced people, why is there no energy for cooking supply to go with it? On the one hand, it is absolutely critical to combine the two as otherwise much of the food provided cannot be consumed. It would seem natural, then, to add cooking fuels and technologies to the current food distribution efforts. However, food distribution is already significantly underfunded, leaving the displaced people at the mercy of donors and the funding they commit, which can vary from year to year. Including cooking solutions in the pool of donor-supported provisions could expose refugees, IDPs and other PoCs to even more reliance on donors and might put them in an even more precarious situation should funding be insufficient. Market-based approaches could alleviate this reliance but affordability and ability to pay are major barriers for displaced populations, particularly for refugees in countries where national laws prohibit them from earning an income. There is an urgent need, therefore, to better understand how food and cooking solutions can best be provided to those affected by displacement and under which models of provision: a fully humanitarian response, a fully market-based approach or perhaps a combination of the two. Sharing lessons learnt and challenges encountered when testing various options will be helpful to avoid common mistakes, iterate quickly and make progress faster.

Finally, the humanitarian energy sector could benefit from the technological advances in energy systems to improve efficiency and effective running of the provided energy solutions. For example, remote monitoring technologies can help monitor consumption of solar mini-grids providing power for appliances such as lights and TVs, as well as electric cooking appliances (induction stoves, electric pressure cookers, etc.). Without advanced load management, power consumption among users can quickly become unequitable, resulting in some users being unable to benefit from the supplied energy services due to greater access to appliances. Similarly, remote monitoring can be used for the provision of metered clean cooking solutions to boost affordability through PAYG solutions. Even though some locations hosting displaced populations might experience poor connectivity, advances towards extending mobile and internet access to everyone have been considerable. Additionally, local, small-scale connectivity solutions could also be utilised instead of waiting for the big infrastructure to reach the more challenging settings.

What next?

The humanitarian stream at MECS have already started exploring the identified themes in more depth, incorporating the feedback received from the consultations. The team will reach out to the stakeholders who have expressed interest in supporting the work under the different themes to combine efforts, identify synergies and maximise impact of respective activities, whether research- or practice-oriented. For any queries, please contact Dr Iwona Bisaga on i.m.bisaga@lboro.ac.uk.