

## Briefing note

# Clean cooking in refugee camps and COVID-19: what lessons can we learn?

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## Headlines

- Continued reliance on biomass fuels for cooking among displaced people has severe health, environmental, climate change and social implications
- Transitions to clean cooking in displacement settings were proving challenging even before the pandemic
- Rwanda, Uganda and Bangladesh offer examples of progress on the provision of clean cooking in refugee camps despite the challenges posed by COVID-19
- Strong partnerships, innovation, and environmentally and financially sustainable models are critical for the provision of clean cooking in displacement contexts
- Times of shocks exacerbate the affordability challenge; mechanisms addressing it should be developed and implemented both as a short- and long-term measure

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## Introduction

There were 79.5 million displaced people in the world at the end of 2019 with approximately 26 million refugees, 46 million internally displaced people (IDPs), 4.2 million stateless people, and 4 million asylum seekers living in urban, peri-urban, rural and camp areas (UNHCR, 2020). It is estimated that 87.9% of refugees and IDPs living in camps rely on biomass for cooking. That reliance is not a matter of choice but necessity: camp residents either receive firewood as part of aid from humanitarian partners or collect it from the surrounding areas. Residents who receive fuelwood allocations often have to collect supplementary firewood as the allocations are insufficient to satisfy all of their cooking needs. This heavy reliance on biomass has numerous implications. There is the environmental aspect: deforestation levels around refugee and IDP camps have increased dramatically. For example, in Bangladesh, around 7000 hectares of forest has been damaged due to the influx of refugees to Cox's Bazar (FAO & IOM, 2018).

This not only exacerbates climate change and its effects, but also causes tension and potentially conflict between camp residents and host communities who also tend to rely on firewood for cooking and heating (and depending on the location). The responsibility for procuring cooking fuel falls predominantly on women and girls and cases of sexual and gender-based violence (SGBV) have been recorded among those venturing out of the camps to collect it (HEDON, 2016).

Most importantly, however, there are severe health implications. With the high prevalence of open fire or traditional cook stove use, displaced people suffer from exposure to a high level of air pollutants causing various respiratory diseases, such as pneumonia and other acute respiratory infections (Lehne et al., 2016). A study in Nepal found that such infections were 10-17 times higher among refugees than other non-crisis affected parts of the population (HEDON, 2016). This is particularly concerning given the current COVID-19 pandemic which has not spared refugee and IDP camps. Not only are those settings challenging due to their high population density, but they often lack access to basic services such as water, sanitation and healthcare, making prevention and containing the spread even more challenging.



*A child carrying fuel-wood in a refugee settlement in Cox's Bazar, Bangladesh. Photo credit: Haseeb Md. Irfanullah Source: <https://odihpn.org/blog/environmental-conservation-refugee-crisis-calling-cross-cutting-issue-not-enough/>*



*Somali women carry firewood at Kobe refugee camp in Ethiopia, 2021. Photo credit: J.Ose <https://www.flickr.com/photos/unicefethiopia/8286868373>*



Women cooking. Nepal. Photo credit: IRIN/Naresh Newar Source: <https://news.un.org/en/story/2014/11/483492-new-un-targets-indoor-air-pollution-aim-save-millions-lives-each-year>

## COVID-19 and the challenges in displacement settings

Transitioning to clean, modern and sustainable energy cooking services in displacement settings was proving challenging even before the pandemic. Chronic underfunding of the energy for cooking sector and lack of tested business models for the provision of adequate cooking solutions in complex settings such as refugee or IDP camps have kept progress slow. Issues of accessibility to, and affordability of, clean cooking technologies and fuels have become even more pronounced as energy companies had their operations and supply chains interrupted by national and global lockdowns. Such measures, to various degrees, have also impacted on people's livelihoods and income generation opportunities. This is applicable to countries where displaced people have the right to work, such as Uganda, Rwanda and Ghana.

Those having to rely solely on fuel distributions and pushed to frequently supplement them with self-collected biomass have been affected as the ability to leave the camps has been significantly reduced or eliminated altogether due to related COVID-19 prevention and protection measures. On the other hand, continued movements could mean an increased risk of transmission and exposure. A notable example of that has been the influx of thousands of Ethiopian refugees fleeing the conflict in Tigray to Sudan. The already precarious situation has been further aggravated by logistical challenges to reach the refugees with critical provisions. While food distribution is ongoing, energy for cooking is yet to be addressed.

## Progress on clean cooking transitions in refugee camps

However, there have been some positive developments in the realm of clean energy for cooking in displacement settings over the year 2020.

### Rwanda

In Rwanda, Red Cross donated 3,481 cooking gas cylinders to refugees in Mahama camp in April 2020. That number covered 49.7% of the existing gap of 7,000 cylinders to reach all households with a clean cooking fuel (UNHCR, 2020a). Additionally, among those who already had LPG cylinders (where one

cylinder is shared between two households), 22,298 households used gas refilling services for domestic cooking energy between April-May 2020 (ibid.). This shows that once the necessary equipment, which requires high upfront investment, is provided to refugees, the uptake of LPG is high and fuel refills continue. A private sector provider is responsible for gas distribution in the camp. The transition to LPG in Mahama- the largest refugee camp in Rwanda, and pellets and briquettes in the other, smaller camps, is led by the Ministry in charge of Emergency Management (MINEMA) and UNHCR Rwanda (UNHCR, 2021), and is heavily driven by the Rwandan policy which aims to decrease the use of firewood from approximately 80% now to 42% by 2024 (REG, 2021).



*Burundian refugees at the Mahama camp, Rwanda. Photo credit: EU/ECHO/Thomas Conan*

## Uganda

In the Rwamwanja refugee settlement, refugees have experienced similar lockdown-related restrictions as in many other countries, limiting movement and livelihood opportunities. This has also meant less fuel for cooking, as reliance on firewood is still high. The extraordinary circumstances under COVID-19 have led the team at UNHCR Uganda to turn this new reality into an opportunity. Working with environment and energy development partners, they rapidly scaled up the delivery of uncarbonized briquettes made from readily available waste materials (e.g., agro-waste or household by-products). The manufacturing process of such briquettes follows the ‘reuse, reduce and recycle’ principles of environmental management and promotes more sustainable consumption. Having established the supply chain, refugee community members were trained in groups of five on how to use the fuel and to promote energy-saving technologies. Additionally, health and hygiene promoters, who were already deployed to work with the refugee communities on the COVID-19 response, were trained in energy-efficient cooking practices to accelerate the adoption of more sustainable energy technologies (UNV, 2020). The case of Rwamwanja demonstrates how quick mobilisation of resources and the ability to leverage existing community structures can help address fuel poverty in times of shocks with the view for long-term impact.

## Bangladesh

In Bangladesh, a UNHCR and the World Liquid Petroleum Gas Association (WLPGA) programme with the aim to transition the Rohingya refugees in Cox’s Bazaar to LPG was launched in August 2018, following a pilot programme earlier in the year. At that point, Bangladesh was already among the fastest growing LPG markets in the world as a result of the government’s support for LPG deployment throughout the country. In 2020, WLPGA supported UNHCR and local NGOs to extend access to LPG into the refugee camps in line with WLPGA’s Good Industry Practices Guidelines and WLPGA’s Cooking for Life objectives (WLPGA & UNHCR, 2020).



LPG cylinders in Cox's Bazaar, Bangladesh. Source: [https://commons.wikimedia.org/wiki/File:Rohingya\\_Refugees\\_Camp\\_in\\_2019.68.jpg](https://commons.wikimedia.org/wiki/File:Rohingya_Refugees_Camp_in_2019.68.jpg)

Despite the COVID-19 outbreak and the challenges of continuing to raise awareness and distribute LPG to refugee households, the programme carried on with a recent study showing the decrease in demand for firewood falling from 462,000MT/year to 37,000MT/year after the introduction of LPG. In addition to the reduction of household air pollution and the increase in LPG uptake in neighbouring businesses, the programme has helped increase the food diversity index from 0.24 to 0.34 among the Rohingya households, and from 0.34 to 0.48 among the host community ones (ibid.), meaning that both communities have more diverse diets than before. The achievements of the Bangladesh programme can offer lessons on how strong partnerships inclusive of local stakeholders, determination of all parties involved, expert knowledge and perseverance with finding ways to continue awareness raising and championing cleaner cooking alternatives can be successful even in challenging times such as a global pandemic. Additionally, the programme has utilized simple and cost-competitive LPG equipment (with training on the use of it provided alongside it), resulting in high levels of adoption (ibid.). While benefits of the transition to LPG are clear, the remaining challenge of making the programme financially sustainable will require continued multi-stakeholder collaboration and commitment, and further work on understanding which models could pave way to affordable price points for refugees once free refills cease.

### What lessons can we learn?

The above examples show that clean energy for cooking in displacement settings is a particularly challenging issue, but one that should be prioritised on the humanitarian agenda given the critical role it plays in building refugees' resilience to shocks, including conflict and epidemics/pandemics. Awareness, accessibility and affordability will have to be considered together with local cooking practices and training needs which help ensure adoption and continued use of clean cooking alternatives to highly polluting and inefficient fuels and stoves. There are several lessons to be learned:

- 1) Partnerships are key: whether the UNHCR- WLPG partnership to transition the Rohingya refugees and host communities to LPG in Bangladesh, or the UNCHR – MINEMA – private sector partnership to provide LPG to refugees in the Mahama camp in Rwanda, bringing together policy, implementation and expert knowledge partners can boost the effectiveness of clean cooking interventions, maximising impact and learnings which can

be further used for the improvement of current or future projects or programmes. Strong partnerships can also ensure that progress is not hindered in times of adversity.

- 2) The need for innovation is particularly salient, and perhaps also propelled, in times of crises: the sudden inability to move in and out of the camps has posed high risk of severe or exacerbated malnutrition among displaced communities as a result of insufficient cooking fuel supply. The case of Rwamwanja shows that locally-driven innovation with the use of existing resources can alleviate that risk by offering a cleaner alternative. Here, too, partnerships' decisive action and a cross-sectoral approach have enabled a pivot with the potential to address the high biomass reliance among the Rwamwanja residents over the long-term.
- 3) The urgency for developing environmentally and financially sustainable models for the provision of clean cooking in displacement settings has never been more evident. It requires not only a degree of experimentation with potential solutions, but also significant funding and long-term commitment and thinking. In times of shocks such as the current pandemic, this is put to test more than ever, as sources of funding are under particular stress and might get redirected to support the response efforts. However, it is clear that affordability, especially in contexts where the displaced people are unable to earn an income, will continue to be among the biggest of barriers. One route to change that is to promote a shift in the way the displaced people are treated in national policy making to enable greater access to energy and other services. Another is to demonstrate the scale of the need for clean cooking solutions in displacement settings to attract more investment and through support mechanisms such as subsidies, Results-Based Financing (RBF) schemes and concessions on the supply side, and energy vouchers on the demand side, build markets for clean cooking fuels and technologies that can serve both the displaced and host communities. Ideally, these two routes should be pursued in parallel to maximise the chances of a successful transition to clean, safe and affordable cooking solutions.

Although this briefing note has focused on the impact of COVID-19 on access to modern energy cooking services in camp settings, the challenges for displaced people in urban and peri-urban areas are also important to address. Far less is known on their cooking and other energy needs, and how best to support access. It is important that policies aimed at supporting energy access in urban areas consider marginalised communities such as displaced people, now more than ever.

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