

How to Address the Cooking Fuel Crisis among Rohingya Refugees

Christopher LeBoa, UC Berkeley School of Public Health

In 2017, the Rohingya refugees were the center of international attention due to their mass escape from genocide at the hands of the Myanmar military. More than 700,000 Rohingya refugees fled by walking several days to the relative safety of Kutupalong, the largest refugee camp in the world. Humanitarian assistance flooded in, amounting to around \$1 billion dollars per year for the first two years of response. In the commotion and the rush to provision people with their needs to survive, no organization provided funding for cooking fuel, so this basic human need was left unfunded.

As a result, the Rohingya resorted to cooking with plastic bags, donated clothes, and cutting down trees in the neighboring Teknaf forest to cook, which all had various negative impacts on the community. After more than a year, the UN High Commission on Refugees and the International Organization for Migration agreed to provide liquefied petroleum gas across the camps, creating the largest distribution of cooking fuel in a displacement setting to date.

In 2022, I supported an evaluation of this program conducted by the International Center for Diarrheal Disease, Bangladesh. The evaluation showed that the program provided significant improvements in the health of individuals, a reduction of food insecurity rates, a reduction of deforestation, and increased the number of children attending school.

The Problem

Unlike lifesaving support such as shelter and food, cooking fuel has historically not been provided by humanitarian organizations. Lacking other options for cooking fuel, Rohingya refugees turned to the surrounding forest for firewood. The use of the nearby forest for cooking fuel led to deforestation around the camps, instigated tensions with the host community, and kept Rohingya children from going to school because they had to go collect wood. Additionally, burning biomass for cooking is associated with respiratory illness.

The Program and Evaluation

To reduce the reliance on firewood for cooking, the government of Bangladesh, together with UN agencies and NGOs, freely provided each of the 195,000 refugee households (and 45,000 host community households) with one liquefied petroleum gas stove and cylinder starting in 2018. They also provided hands-on-training and follow-up visits to households to assess the safety of installation and use. Households were provided with free gas refills about once a month, depending on family size.

As mentioned above, a research team from Stanford University and the International Center for Diarrheal Disease Research, Bangladesh evaluated the program. They enrolled 1,200 households: 600 households that had been using the gas for 12 months and 600 households that had not yet started using it. Households had to have a child between 6-23 months old at enrollment. Stove use and particulate matter were monitored in 202 households both short-term (48 hours) and long-term (3 months). In addition to conducting quantitative measurements, researchers interviewed Rohingya community members, including married and unmarried men and women, adolescent boys and girls about domestic and inter-group harassment and violence related to cooking fuel collection and use, gas distribution and training, and program recommendations. They also interviewed gas distributors, neighborhood leaders and NGO workers about similar topics.

Evaluation Key Findings

The program evaluation found that the distribution of liquefied petroleum gas to refugee households and host community households was associated with:

- Reduced deforestation
- Averted respiratory illness
- Increased spending on food
- Improved mental health
- Increased time for care and study
- Reduced burning of plastic as cooking fuel
- Reduced inter-group and domestic violence

Additionally, the program was able to achieve everything listed above at a low cost. The total cost to provide gas to an average 5-person Rohingya refugee household was \$0.34-\$0.47 per day. The annual cost to provide one household with a gas stove and refills was approximately \$99 and the distribution costs was an additional \$25-\$73.

Next Steps

Although the program was successful, provisioning cooking fuel is just part of a band-aid solution for a larger geo-political crisis with no real solution in sight. And showing that an intervention like cooking fuel distribution benefits people does not mean that the intervention has enough funding to continue. The World Food Program has recently made the decision to cut food rations by almost 20% and the funding for continued cooking fuel provisioning is not secured.

Funding priorities shift as aid agencies grapple with new challenges and refugees needing food and shelter, but the plight of the Rohingya remains unsolved. The Rohingya are unable to gain work or citizenship in Bangladesh and cannot return safely to Myanmar where much of the land they once lived on has been seized by the Burmese military.

In order to further improve the lives and safety of Rohingya refugees it is essential for U.S. officials to support increased refugee resettlement in the United States, increase diplomatic pressure to hold Myanmar accountable to its actions, and provide a safe path towards an independent Rakhine state. As a stop-gap solution, it is also necessary for USAID to include cooking fuel as part of its mandate in provisioning support for refugees.