



Photo Credit: Mercy Corps Uganda

Refugees in Bidi Bidi test information mobile application

AGRI-FIN MOBILE UGANDA

Digital Innovation Challenge Spurs Zeed Energy Investment in Refugee Settlement

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In 2016, Uganda took in refugees from South Sudan, and the numbers continue to grow rapidly, with more than 977, 746 refugees and asylum seekers from South Sudan currently in Uganda, bringing the number to a total of more than 1.25 million refugees in Uganda.

Filippo Grandi, the UN's high commissioner for refugees reported that Uganda is at a breaking point with the surging number of refugees fleeing war struck South Sudan¹. This influx implies tremendous pressure on the host communities and the Ugandan economy. In addition to that, the available aid and relief does not match the needs nor scale of the crisis.

¹ <http://www.unhcr.org/news/press/2017/3/58d3abab4/breaking-point-imminent-government-uganda-unhcr-say-help-south-sudan-refugee.html>

Activity

Mercy Corps partnered with The Innovation Village, UNCDF, and DanChurchAid seeking for innovations that address specific challenges that bridge refugee socio-economic gaps and restore their dignity so that they become agents of development of their own lives as well as their host communities. This activity was shortened as Hack4Refugees and a video on the same is [here](#). Specifically, these innovations were sought:

- › Agricultural Services for increased productivity and marketing
- › Better access to financial services (mobile/digital)
- › Information dissemination, delivery of education/training/literacy
- › Distribution of items and goods

Using the principles of Human Centered Design, the selected teams were immersed with the refugee community to co-create feasible solutions with the refugees before prototyping and testing their solutions over a three month period.

The teams visited BidiBidi to test their solutions on ground with target customers. The objective of the visit was to understand the environment for which they are innovating. This paved way for the Accelerator program to iterate in time for DEMO Day.

Impact

One of the companies that took part in the challenge known as Zeed Energy, have started implementing their solutions. Zeed Energy, who provide alternative clean cooking fuel, contributes to reduction in deforestation, and better nutrition as refugees are able to cook more meals due to cheaper and longer lasting briquettes as alternative to charcoal from trees or firewood.



Mercy Corps Uganda
Briquette production

By facilitating the iteration and testing process, Agri-Fin Mobile and partners enabled Zeed energy team to research the refugee energy business opportunities and challenges before finally iterating their value proposition and setting up a production site in Bidi Bidi, including training and demonstrating their solution.

From their research and exposure visit, Zeed Energy discovered that due to the high cost of charcoal, and energy poverty, some refugees were cooking one meal a day and preferred to cook low energy intensive meals. This has a direct impact on the health and nutrition conditions.

Another finding was that although the cooking briquettes were affordable and cheaper than charcoal, refugees couldn't afford the cooking stove. This led to innovating and training refugees on how to construct their own stoves using a few bricks and materials accessible to them. It was discovered that it was easy for refugees to construct their own cooking stove and this reduced the investment to briquettes only.



Mercy Corps Uganda
Bidi Bidi refugees learn about briquettes

Beyond product iteration, Zeed also looked to introduce new products such as cooking bags which aim to reduce the energy hours food needs to be exposed to so as to maximize return on fuel and create savings for refugees.

To sustain and localize production and marketing/sales of the briquettes, Zeed energy team found that although the market existed, raw material in form of biomass/waste was difficult to obtain in the amounts needed. Wanting to spur entrepreneurship among refugees as briquettes business women and men meant Zeed team had to find solutions to source raw materials. Currently the company is talking to farming refugees and host communities and organisations distributing seeds to map potential

post-harvest farm waste/biomass as raw material sources. They are also discussing with processing plants near Bidi Bidi as additional biomass source in addition to exploring cultivation of biomass rich plants as sustainable raw material source. At household level they are discussing with local government district officials on the potential of using tree stumps for the stumps that rarely grow back like evergreen coniferous shrubs and trees. And to finance these investments, the company is in advanced stages of acquiring grant funding to scale their operations. Mercy Corps teams in West Nile are also partnering with Zeed Energy via the Mercy Corps Innovation Centers in the refugee settlements for product-market fit testing, local entrepreneur development creating opportunities for refugee entrepreneurs and sales for Zeed Energy.

For companies like Zeed energy the impact of the digital innovation challenge for refugees will be far reaching for profit, people and planet as they expand into new markets, provide affordable and cost effective alternative energy, unlock entrepreneurship opportunities, improve nutrition and abate the rate of deforestation and reduce the time families spend looking for increasing scarce firewood in Bidi Bidi refugee settlement.

Here's what Zeed Energy's CEO – Sarah Basemera had to say about the Hack4Refugees: "We were meant to start initial operations in Rhino camp settlement. The Hackathon helped us to see the values of connectivity in Bidi Bidi and most important interact with the community more who showed desire for the solutions that we were planning to introduce to the settlement, they told us that they needed our products which was key to our starting. Other partners that we are contacting have confidence to work with us due to having been a part of the H4refugees"

A video on the hackathon for refugees is available here -- <https://www.youtube.com/watch?v=klr7uHArjK>