

GreenFugee

Digitizing Behaviour Change Communication for Last Mile Refugee Green Economies

Pilot Project

Final Report



Green Innovation Challenge Fund

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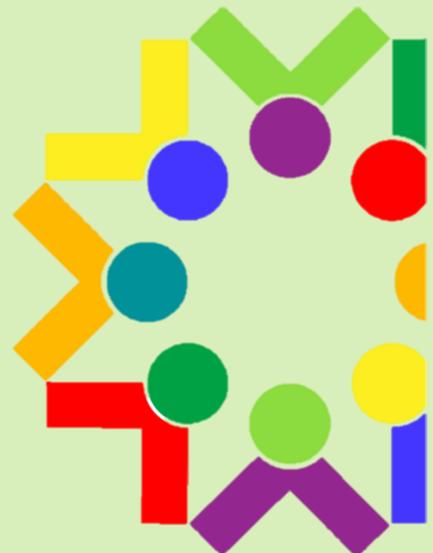
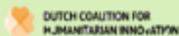
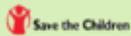




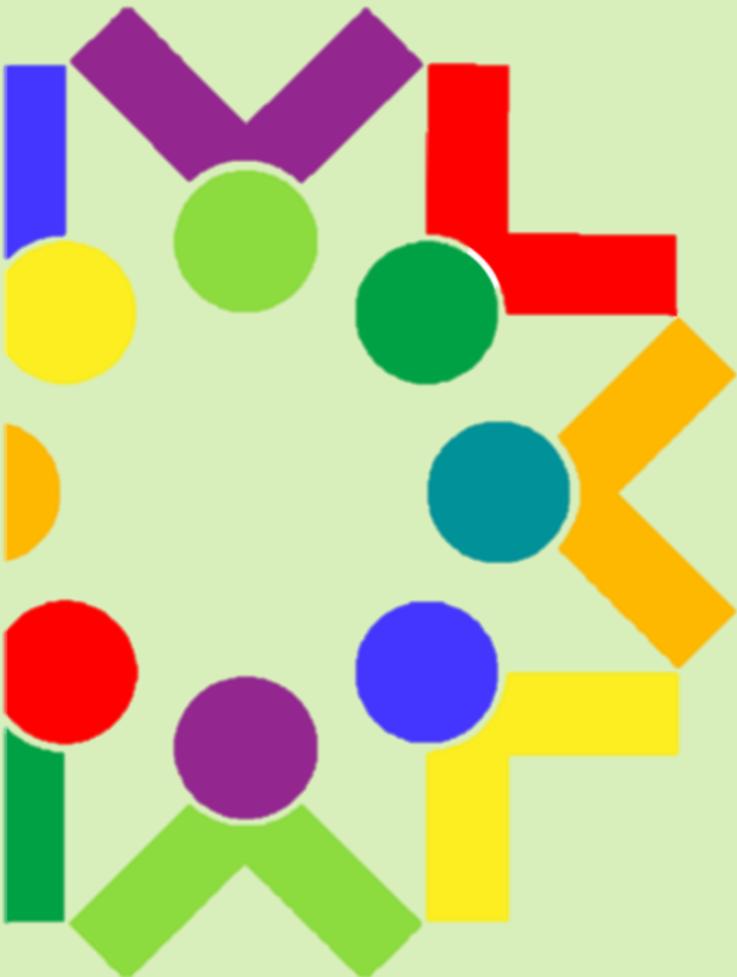
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1 **Key highlights from the pilot**

- 59.3% of respondents sensitized were willing to buy clean energy products although some of these stated that they were not immediately able to afford them.
- During an end line survey conducted via phone calls, 100% of respondents who completed the IVR call to the end stated that their knowledge about clean energy had fairly improved as a result of the campaign
- Phone usage – and hence IVR effectiveness - is influenced more by airtime access (purchase and use) than signal quality
- Long phone numbers with unfamiliar area codes may be regarded suspiciously by refugee respondents which may contribute to low call responses. The project used 0200522704, and 0200522702 to call respondents. 17% of those who reported having not picked the call stated that they did so because the number was suspicious or strange. Whereas short codes preferably with 3 digits may address such suspicions, the use of the long phone number allows users to be able to call back. Obtaining the short code from Uganda Communications Commission is also a challenging and expensive undertaking. If this is the preferred way forward, the process should be started at least 7-12 months before the planned go-live dates for projects
- Participation of the community is heavily dependent on the buy-in and involvement of trusted community leaders
- The effectiveness of IVR in low phone ownership settings can be multiplied through setting up clean energy information groups around the existing phone owners. This was suggested by community members as a common channel for communicating beyond the reach of phone owners.





2 Summary of activities and progress against target

1.1.1 Content development

ANCHOR developed content co-creatively with partners Viamo, EnVenture, Kumi Kumi, Raising Gabdho, Viamo, and with input from the Response Innovation Lab (RIL), SNV and Mercy Corps. The Behaviour Change Communication (BCC) messages emphasized the benefits, best practices, and availability of clean energy products and services including solar and improved cooking technologies within Zone 3 of Bidi Bidi refugee settlement. Weekly virtual coordination meetings were held with key partners to review progress and obtain feedback.

1.1.2 Launch, awareness creation, and field activation

ANCHOR staff conducted activation meetings in Yumbe District for two weeks - including with Office of the Prime Minister (OPM), UNHCR, Dan Church Aid (DCA), Mercy Corps, Yumbe District Local Government, Kululu Sub County, and the Refugee Welfare Council for the Zone and obtained their buy-in and participation. Each of these offices were visited and the concept note shared with them. Additionally, community members were mobilized and 1,000 consent letters were signed by them. Other meetings were held in the field with private sector partners (EnVenture, Raising Gabdho, Kumi Kumi, D.Light, and Village Power) who served as entry points for engaging the community.

The team successfully collected the 1,000 phone numbers targeted from both nationals and refugees comprising 48.1% females, 51.9% males, 22.1% nationals, and 77.9% refugees. (Table 2). The majority (65.3%) of these were males and females aged between 15-35 years. This is arguably the most active part of the population directly impacted by, and influencing, the low penetration of clean energy in last mile communities. Of this demographic, 51.3% were female youths. Female youths are generally considered worst hit by the lack of access to clean energy including exposure to respiratory tract infections during cooking; loss of productivity due to wood fuel foraging activities; and sexual and gender based violence among other risks (Table 3).

ANCHOR staff participated in a field monitoring visit by RIL, SNV, and Mercy Corps on February 18, 2020 during community mobilization and phone number collection in Zone 3.

From February 19-20, 2020, ANCHOR and other innovators hosted stakeholders in a two-day learning event and discussed innovations, findings, lessons learnt, progress and next steps. This was attended by DCA, SNV, SCI, DRC, RICE-West Nile, Phoenix solar, DFID, and RIL.

The project was also introduced to partners operating in Zone 3 during a zonal coordination meeting on February 19, 2020.

1.1.3 IVR System Set-up

The ANCHOR and Viamo team drafted the flow chart for the IVR platform, which was reviewed by partners during the “customer journey experience” mapping which took place on November 18, 2019 at the Save the Children Country Office. Viamo built the IVR system using inputs gathered during the “content development and flow sequence meetings” with ANCHOR. Pushed call durations were set for a maximum of 3 minutes per call to reduce drop-off rates based on past experience that indicates the user experience is severely impacted if calls are too long. The IVR system was tested by key partners and community members who identified key issues for refinement. It was then approved on February 25, 2020 by Response Innovation Lab, and successfully launched on February 26, 2020.

1.1.4 Community Sensitization and Data Collection

Upon consenting in writing to the collection of their phone numbers and participation in the pilot, respondents were interviewed using Interactive Voice Response (IVR) administered through their registered phone numbers. A total of 2,600 calls were made to 1,000 unique phone contacts. Respondents who answered their calls were prompted to respond to preset questions by pressing specific phone keys. Responses compiled by the IVR system were then analyzed to inform community knowledge, attitudes, and perceptions towards clean energy. 33 contacts (14 eco stoves and/or briquettes, 19 solar) of consenting respondents were compiled and shared with clean energy suppliers and service providers to serve as market leads.



3 Beneficiaries

	Planned beneficiaries	Total beneficiaries reached
Direct beneficiaries		
Men (47%)	179	91
Women (53%)	202	59
Total direct beneficiaries	381	150
Indirect beneficiaries		
Men (13%)	88	14
Women (18%)	168	87
Children (16%)	329	130
Boys (16%)	329	130
Girls (15%)	309	122
Teenage Boys (10%)	206	81
Teenage Girls (9%)	185	73
Elderly Men (1%)	21	8
Elderly Women (2%)	41	16
Total indirect beneficiaries	1,676	661

A total of 150 respondents listened to the IVR calls out of 381 targeted previously.

The number of beneficiaries reached was affected by deactivated phone numbers provided by respondents (of 15.5%); nonresponsive calls (of 43.5%); and connection challenges due to poor VPN set up by the mobile phone operator and a weak network coverage both of which resulted in a high call drop off rate (of 26.0%).¹ Nonresponsive calls were generally the result of calls made while the respondent was away from their phone either during phone charging or other activity, and callers who recognized the incoming call alert but opted not to answer due to mistrust or lack of interest.

The project employed inbound and outbound calls. Telecom operator may have been taking a minute amount of airtime; moving forward, Viamo will discuss mitigation measures with the telecom operator to waive these minute charges (\$0.01). During this project, Viamo used a work-around to address this issue by setting up the system to have it ring repeatedly when the caller dialled in until the caller hung up. This would then trigger the call-back mechanism. This allowed callers to access the system even without a small minimum amount of airtime on their phones.

Indirect beneficiaries were computed from the average household size of 5.4 obtained from the most recently published Bidi Bidi Refugee Settlement Factsheet.²

A large number of refugee women in Bidi Bidi (38%) do not have access to mobile phones, and very few (36 %) own them.³ Women and men who own mobile phones in Bidi Bidi are therefore a critical resource in their community as the rest rely on them for obtaining news and other information.

During community engagements, a number of community members suggested the need to form local clean energy information groups to further promote its utility beyond those who own mobile phones. It is anticipated that, on average, this will result in a multiplier of at least two additional households that will be sensitized by each direct beneficiary about the benefits of clean energy – thereby increasing the total population reached by the project to 2,430 women, children, men, boys, and girls.

A validation session with key stakeholders is planned to take place in early April 2020. The aim is to influence a shift from relief to a market-based approach based on the findings from this report. For instance, gradually shifting food distribution by the World Food Program (WFP) and other relief operations to a cash-based system can increase affordability for clean energy products and services.

¹ Phones deactivated during countrywide campaign to clean up the registry following high profile murders in Uganda.

² UNHCR. (2020). *Uganda – Refugee Statistics January 2020*. Published by United Nations High Commissioner for Refugees (UNHCR) and Office of the Prime Minister - Uganda. Accessed on March 13, 2020 at <https://data2.unhcr.org/en/documents/download/73980>

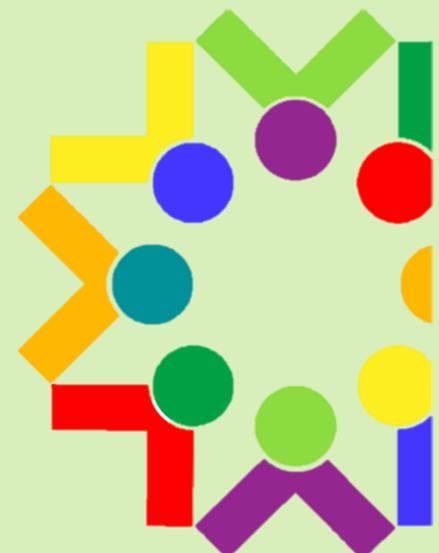
³ GSMA. (2019). *Bridging the Mobile Gender Gap for Refugees: A Case Study of Women’s Use of Mobile Phones in Bidi Bidi Refugee Settlement and Kiziba Refugee Camp*. Published by GSM Association in March 2019.



4 Deliverables

Table 1 Table of Deliverables

Deliverables	Achieved	Verification Source	Comment
Multi-lingual messaging content developed in up to four locally most spoken languages	Three multi-lingual messages developed in Juba Arabic, Aringa, and English	Verification: Messaging script (attached in Annex 11.3)	Kakwa language was dropped from list due to conflict sensitivities identified at inception ⁴
IVR system tested by internal staff	IVR successfully tested by ANCHOR, SNV, and approved by RIL Coordinator	Verification: VIAMO test report (attached in Annex 11.4)	
Community feedback on project	RWC, LC1, and OPM representatives expressed project buy-in (post project questionnaires)	Letters of support from community leaders (attached in Annex 8.6)	
Increased knowledge and practices of community members (381 completed surveys)	150 out 1,000 IVR calls made were completed 100% vs 381 anticipated (some people interrupted the call before the end)	Viamo dashboard call log (attached in Annex 8.7)	Low completion rate (39.4%) due to deactivated contacts (15.5%) nonresponse (43.5%) and network downtime (26%)
RIL Field Innovation Monitoring Tool	Iteration diary filled Project features indicated Unexpected results recorded	RIL Field Innovation Monitoring Tool (attached in Annex 11.88.8)	
Final report	Draft Final Report submitted	This report	Validation session with stakeholders is planned in early April after receiving final IVR call reports



⁴ Local leaders advised that using Kakwa would pit rival groups such as Bari and Pojulu against each other.



5 Challenges, Adaptations, and Mitigation Measures

Low mobile phone ownership

The majority of the people met during the scoping exercise to collect phone numbers in sampled villages of Zone 3 did not have phone numbers. This fact had been previously established in a study that placed phone ownership among men and women in Bidi Bidi at 67% and 36% respectively.⁵

Consultations with target community members indicated that low phone ownership was partly the result of the government's call for phone users to re-register their sim cards, which left many refugees without active numbers due to their failure to meet the new registration requirements. This made it impractical to collect all 1,000 planned active phone numbers from only two villages. Additional phone numbers were collected from Village 9 in order to achieve the set target of 1,000 phone numbers with signed consents.

Poor network connectivity and access to airtime

There were two prominent phone networks being used by respondents, namely Airtel and MTN. Whereas there was a better reach and signal strength for Airtel, the relative lack of access to airtime for last mile communities resulted in more people choosing to own MTN SIM cards (more agents on the ground). This resulted in a high call drop off rate during the IVR execution phase. Push calls were therefore repeated and where call drops persisted, a follow up call survey was conducted for a sample of respondents to establish the cause of the call drops i.e. whether deliberate or due to system failure. The result of this verification was then applied to adjust the data for error.

Competing livelihood activities

During phone number collection, most of the target groups members were engaged in livelihood activities such as Cash for Work, foraging firewood, construction and casual laborers at food distribution points. This negatively affected attendance of community members during project activities. In order to address this, door-to-door visits were adopted with flexible scheduling of meetings in the afternoon when community members were least likely to be engaged.

Unrealistic expectations

During the community mobilization activities, both leaders and the target groups expected free products such as improved stoves, solar products, briquettes and phones. This is as a result of their experiences with other organizations distributing these products free of charge. To address this challenge, the team laboured to explain the approach of the pilot and the kinds of benefits involved.

Phone sharing

A number of respondents interviewed used phones shared within their households. This was true in the majority of villages surveyed. Whereas this could potentially affect the traceability of respondents, individuals without own phones but with easy access (borrow, rent phones) were registered.

High mobilization and call costs

In terms of the number of minutes spent per a completed call which is a reflection of the technical challenges faced, the target was to use about 3 minutes per completed call but in the end, we used 13.2 and 4.2 (i.e. 440% and 160% of planned duration respectively). This caused the unit call rate per call to rise to \$0.9 and \$0.2 whereas we could have spent between \$0.1 and \$0.2 per completed call. This affected the number of times we were able to redial nonresponsive calls hence limiting the calls made to 150 out of 381 targeted.

Additionally, we used three staff to collect 1,000 phone contacts and signed consent letters instead of one. This was necessary due to the shift made from promoting the phone number for community members to call, to using push messages. The additional resources were reallocated from the cost of branded caps and fliers which were not procured. Once the challenges mentioned earlier are fixed, the call costs should be substantially reduced hence giving more value for money.

⁵ GSMA. (2019). *Bridging the Mobile Gender Gap for Refugees: A Case Study of Women's Use of Mobile Phones in Bidi Bidi Refugee Settlement and Kiziba Refugee Camp*. Published by GSM Association in March 2019.



6 Successes

High community buy-in

Local leaders and community members demonstrated eagerness to embrace clean energy adoption. This was likely influenced by prevailing challenges the communities are facing. For instance, in Village 8 and its surroundings, reduced tree cover is affecting food, energy, and physical security.

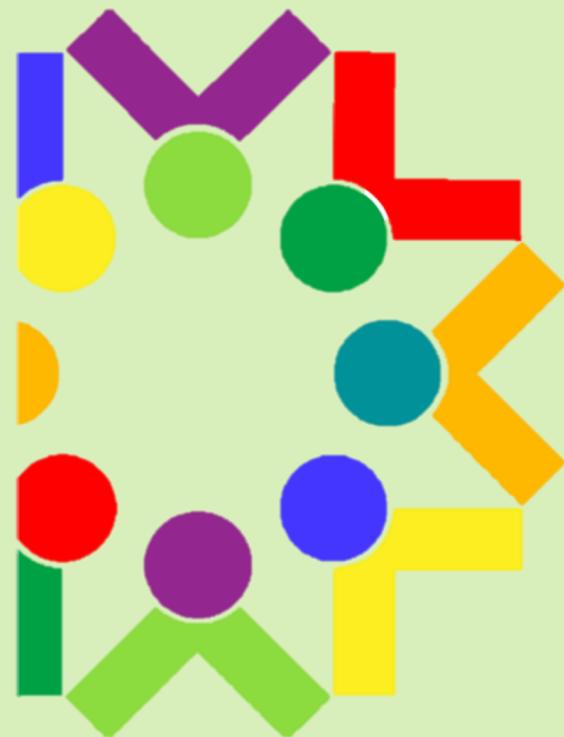
The RWC1 Chairperson of the village reported that the number of rape and assault cases were on the rise. Since the start of the year 2020, two women have been raped on their way to fetch firewood without redress from duty bearers. To cope with the increasing threat faced during foraging for wood for cooking, the size of foraging gangs is growing.⁶ This has heightened the risk of escalation of violence. Community members consulted were therefore very eager to participate in any initiative which helps to overturn this problem. Due to this, the pilot gained maximum support from community members, and a few members volunteered to serve as our focal persons and green ambassadors.

High community willingness to buy clean energy products

On average, 59.3% of respondents who listened to the IVR message were willing to buy clean energy products. Of these, 58.2% stated that they did not have money to buy the products. An additional 29.7% of respondents were undecided about their willingness to buy solar and improved cooking products. The high potential demand for clean energy products is further demonstrated by the high (61.3%) proportion of community members expressing interest to be linked with a clean energy agent. A follow up survey is planned to ascertain the level of attribution for the improved knowledge, understanding, and anticipated adaptation in clean energy.

Peer-to-peer collaboration among innovators enhanced

Through joint learning sessions and field level interactions between staff, there are notable indications of collaboration between partner organizations. ANCHOR is at final states of executing a formal partnership framework with EnVenture to facilitate information sharing that will enhance improved coordination between clean energy vendors and last mile consumers. Discussions are also ongoing to explore partnerships with the Humanitarian Open Street Map and Innovation Village as a result of the project.



⁶ Refugees feeling threatened to forage firewood are increasingly traveling in larger “gangs” to protect themselves in the event of confrontation by host communities who want to repulse them.



7 **Lessons Learned**

High community willingness to buy clean energy products

A high proportion of community members interviewed expressed willingness to buy solar (62%) and clean cooking (46%) products compared to only 3% and 14% who were not willing to buy respectively (Figure 1). Moreover, a sizeable number of the community respondents stated being undecided whether to buy solar (35%) or clean cooking (39%) products. With further engagement, these can be influenced into willing buyers.

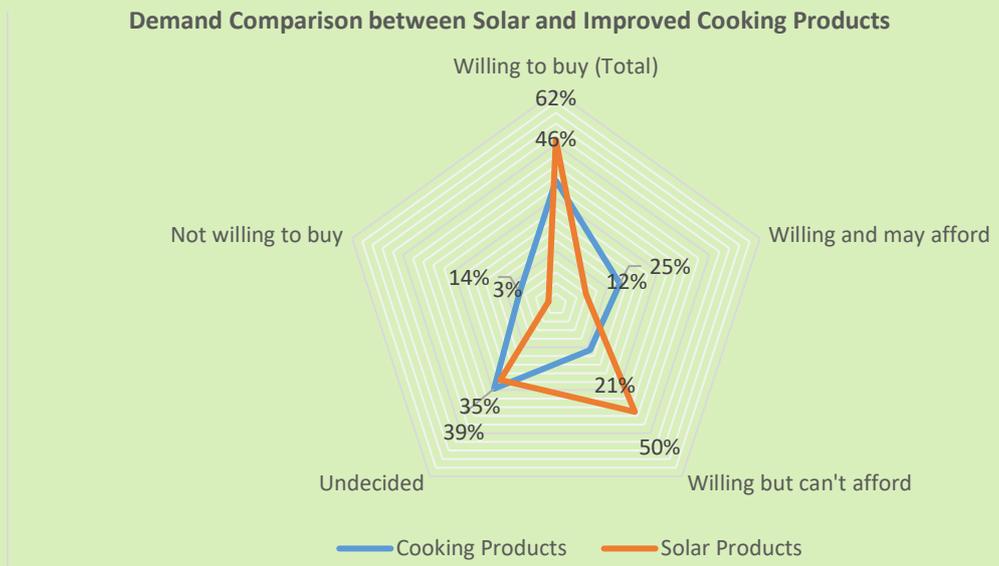


Figure 1 Graph depicting high community demand for clean energy utility

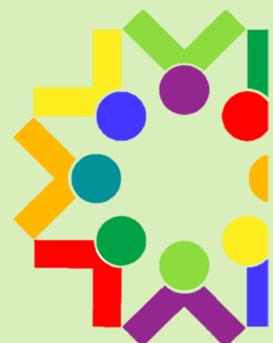
Affordability challenges persist in accessing solar

Fifty percent (50%) of respondents stated that they were interested in buying solar products but could not afford them compared to only 21% for clean cooking products (Figure 1). Conversely, 25% of community members willing to buy clean cooking products did not indicate affordability being a challenge compared to only 12% for solar. This indicates the existence of a substantial market being available for clean cooking products whereas more needs to be done to enhance affordability for solar products.

Additional incentives should be explored to keep consumer groups engaged that also increase their purchasing capacity. This may include but not be limited to providing access to a revolving fund to finance climate smart agribusiness activities. Credit could be used to unlock access to quality inputs such as seeds, land, and extension support. Using credit to access land through rental can also improve the relations between refugees and host communities.

Refugees easier to mobilize than nationals due to settlement patterns

Refugees were approximately four times more in number than nationals at field meetings (Figure 2). This was mainly due to the residences of nationals being further away from the meeting locations. Additionally, nationals were not as severely affected by lack of wood as refugees. It is believed that this may affect their motivation to adopt clean energy products and services.



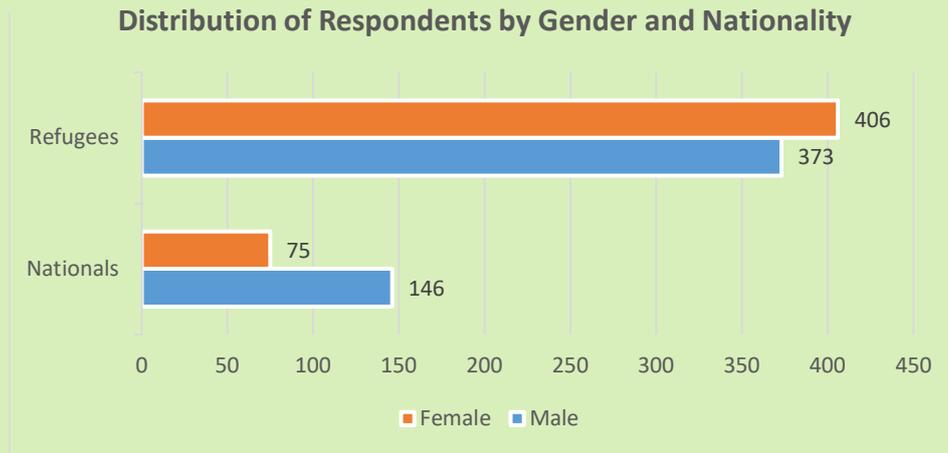


Figure 2 Distribution of respondents by gender and nationality

The relatively low participation by nationals was due to the long distance travelled from their homes which were generally more dispersed in settlement patterns than for refugees. Moreover, female nationals were notably less likely to attend meetings than male nationals. Further inquiry is recommended towards unlocking the participation of female nationals in community activities and decision making.

High youth interest and participation

65% of the participants who attended consultation meetings were youth aged between 15-35 years, disaggregated into 33% female and 32% male youth. This was considered to be a positive outcome considering that youth are the most impacted as wells as used in fuelling activities that are detrimental to the environment.

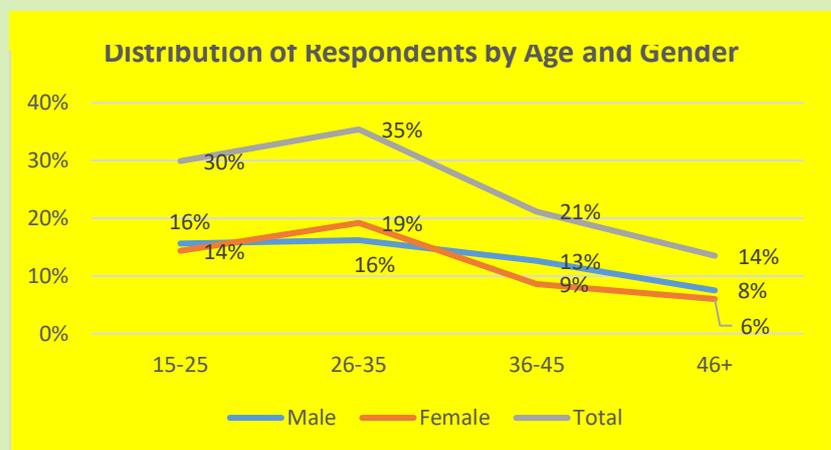
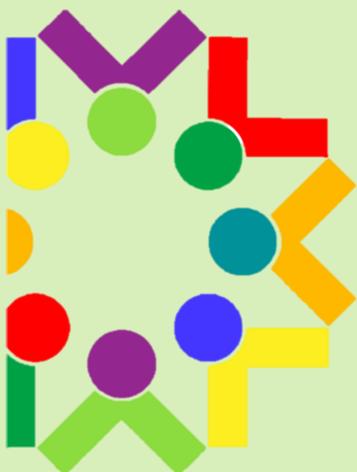


Figure 3 Distribution of respondents by age and gender

Phone network usage influenced more by accessibility of network agents to buy airtime than clarity of signal

While making the decision to select the mobile phone network to host the IVR system and target community for conducting the pilot, the Airtel network was chosen on the basis of its superior reach and quality of call signal in Bidi Bidi Zone 3. However, during the collection of phone contacts and consent letters, it was discovered that the most preferred network in the target community was MTN due to the availability of its airtime and other associated services in the zone. In fact, only 2% of phone contacts of respondents reached were of the Airtel Network while 98% were of MTN.



Low phone ownership among women can be bypassed by setting up information groups

Community consultations established that more men had active phone numbers than the women. Men were reported to generally dictate who owns phones in the house. In the long run, this has disadvantaged women from accessing information. The government's call for phone holders to re-register their SIM cards has exacerbated the problem as women tended to be the most affected due to their household responsibilities, poverty, and male chauvinism. Hence, many SIM cards have been disconnected, and therefore, different households have resorted to using one phone for communicating. During interactions with community members, some women expressed their willingness to identify resource women who would receive IVR messages for onward dissemination to the less privileged. Promoting clean energy sensitization beyond phone ownership limitations by setting up clean energy information groups can be a practical way to make IVR more effective.

Digitization can unlock clean energy potential for remote excluded communities

Several of the community members in Zone 3 interviewed did not have access to information on clean energy products and services despite their interest and necessity. This was attributed to the fact that service providers mostly concentrated in the easy to reach areas.

The issue of supplier and vendor proximity came out vividly during the community mobilization and sensitization meetings. Members in village 8 articulated that,

"We have to move long distances to buy solar products and get after sale information and this is because most of the vendors are situated in the trading centres which is far from where we stay".

Linking such users and vendors through phone connectivity can lead to better access to clean energy.

Girls and women facing increasing violence risks due to declining energy security

During community consultations, the RWC1 Chairperson of village 8 reported that the lack of knowledge on how to best utilize the limited natural resources has resulted into women and girls traveling up to 10 kilometres away from their homes, while looking for firewood, and being exposed to attacks from snakes, scorpions, and monitor lizards. Within a span of two weeks in the same village, two teenage girls were raped and one woman assaulted due to risks associated with energy insecurity. Such terrifying instances have compelled households to move in groups when going to fetch firewood. In addition, since the amount of food ration provided by the WFP has been cut back, selling food rations is no longer an option as a stack of firewood costs a lot more than it used to cost. The pressure caused by the lack of fuel for cooking and the threat posed to women and girls foraging firewood is increasing the likelihood for isolated incidents of violence to escalate into community-level violence.

Choice of language can be key for conflict sensitivity

Zone 3 is inhabited by both host and refugee communities. Refugees occupy 16 villages, and nationals three. The commonly spoken language by the nationals is Aringa, while refugees speak Juba Arabic. Whereas the majority of the refugees can also speak Kakwa, its adoption could provoke negative community sentiments from other tribes especially involving the Pojulu and Bari speaking people. As a result, Juba Arabic was retained as a "unifying language" upon the advice of the local leaders.

Timing of IVR calls affects response rates

The majority of household members consulted preferred being called after 4:00pm because they use their morning time to fetch firewood, prepare lunch in the afternoon, and collect their phones from the charging kiosks. This finding informed ANCHOR and Viamo's decision to push messages after 4:00pm to register improved community feedback.

Long unfamiliar phone numbers regarded suspiciously by respondents

Preliminary feedback from community leaders indicates that the use of a long phone number with an unfamiliar area code may have contributed to the high nonresponsive call rate as refugees tend to be suspicious about being tracked through such calls. A short caller code such as 161 is advised.





8 Sustainability

Linking consumer groups to clean energy vendors

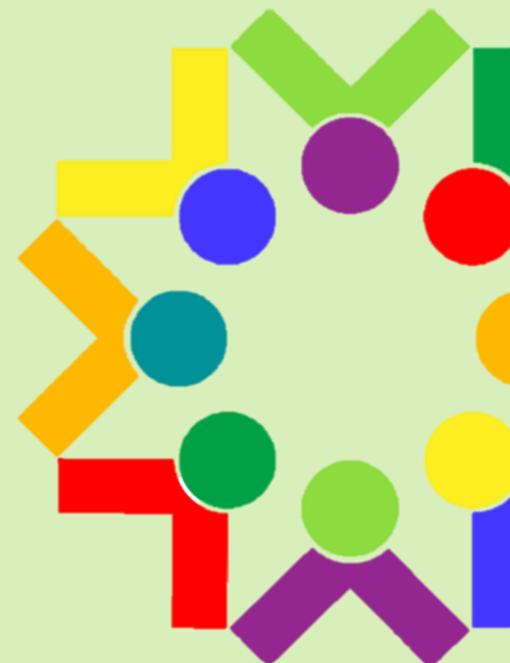
ANCHOR has been working closely with EnVenture's vendors - including the Yoyo youth clean energy cooperative - and identified local leaders who have knowledge of the target areas. These vendors who double as community leaders were trained and briefed on how to collect data, record feedback, report and sensitize the different community members on clean energy products and services. ANCHOR has shared contacts of consented community members, who are willing to purchase clean energy products, with selected vendors as market leads and monitor their clean energy uptake rates attributable to the GreenFugee intervention. The Humanitarian Open Street Map has compiled vendor data including their geographical distribution, clean energy products sold. Once the information is made available, it will be the basis for linking vendors with potential consumer groups.

Redesign and scaling up of IVR-based behaviour change communication

ANCHOR will use the learning from this pilot to refine the project design and to explore opportunities for collaboration that will scale up the use of IVR to promote a clean energy economy for last mile communities especially in refugee settings. Field staff will also continue to attend sector and zonal coordination meetings to strengthen organizational networks and increase opportunities for learning.

The end line survey confirmed the effectiveness of IVR. According to the survey, 100% of those who completed the call to the end stated that their knowledge had fairly improved. The biggest challenge remains in increasing the IVR call completion rate. Already we know that this can be increased through a combination of:

- (i) Selecting the most used phone networks (only 2% of phones collected in the pilot were of Airtel which affected cost and cross-network connectivity)
- (ii) Proper timing of calls to ensure respondents were not busy with other activities during scheduled call times
- (iii) Intensifying joint promotional activities with community leaders
- (iv) Using short caller codes that reduce suspicion as refugees are generally paranoid and think hostile groups from their countries of origin are tracking their whereabouts
- (v) Harnessing the potential for multiplication through phone owners willing to disseminate messages to their circles of influence
- (vi) Introducing incentives for participation such as winning prizes that are publicly awarded on market days or introducing integrated livelihood activities that also increase the purchasing power of vulnerable households





9 Partnership with SCI/ RIL

Networking enhanced

The invitation to present at the Learning events of 19-20 February 2020 enabled the ANCHOR team to collect feedback from opinion leaders, and development partners. This helped to realize areas for improvement, funding opportunities, and mediums of scaling up among others. The information from Humanitarian Open Street Map will be used for linking consumer groups to vendors. ANCHOR has partnered with EnVenture and shared contacts of community members willing to purchase clean energy products. A follow up will be made post project to ascertain the number of market leads converted.

Co-creation synergies

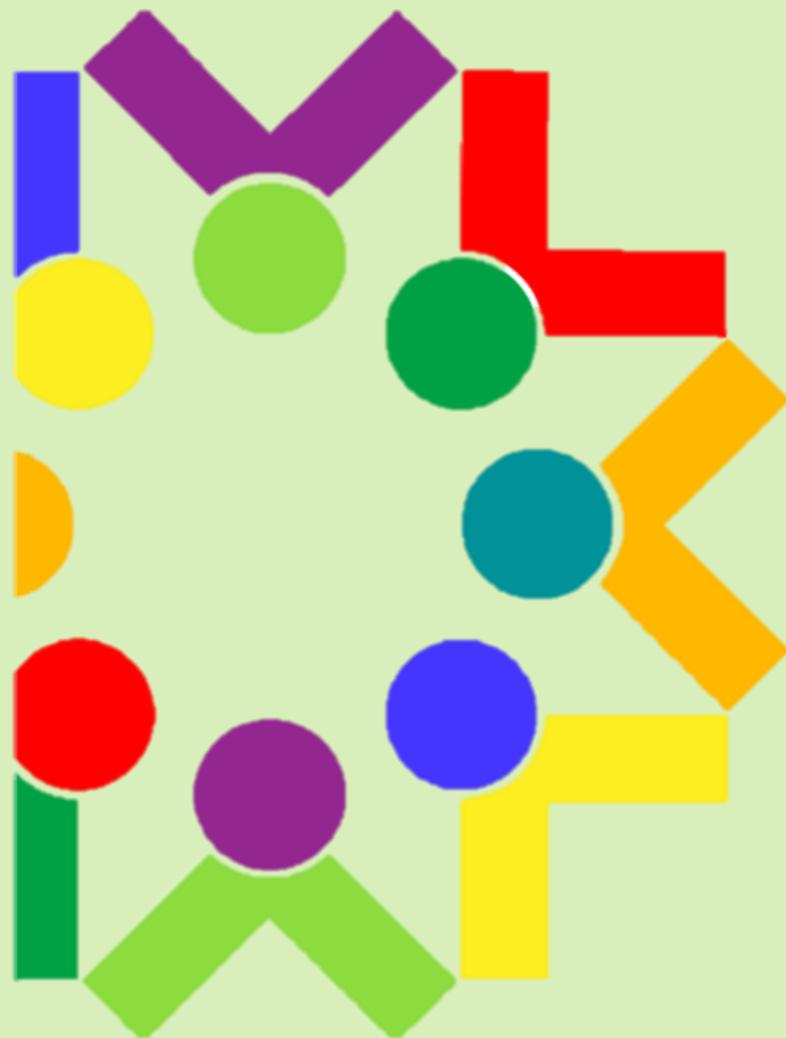
Working alongside other innovators provided the right environment for exponential learning that enabled the design of the pilot to be better. For instance, the importance of the quality of briquettes as a key factor in influencing community attitudes towards the use of bio-efficient cooking technologies was only appreciated sufficiently after interactions with Raising Gabdho.

M&E tool appropriate

The tools for monitoring and evaluating innovation was new and found to be useful considering the fast-changing innovation environment.

Coordination challenges

Coordination challenges resulting from delayed funding limited the available time for data collection and analysis. A tripartite arrangement may be better in managing expectations where three parties are involved.





10 **Beneficiary feedback and stories**

Participating communities expressed utmost interest in accessing information on clean energies. It was reported that most of the suppliers and vendors were concentrated in the busy market centres and this deprived the more remote areas of the opportunity to benefit from the goods and services provided.

The issue of supplier and vendor proximity came out vividly during the community mobilization and sensitization meetings. Members in village 9 articulated that

“We have to move long distances to buy solar products and get after sales information because most of the vendors are situated in the trading centres which is far from where we stay.”

It is also worth noting that during an interaction with the RWC1 Chairperson of village 9, he reported that women and girls are faced with challenges when going to fetch firewood. Women and girls for allegedly move a distance of 10 kilometres away from their homes, while looking for firewood. They are exposed to attacks from snakes, scorpions and monitor lizards. A few cases have been recorded of rape in a span of two weeks in the same village where two teenage girls were raped and one woman assaulted. Such terrifying instances have compelled households to move in groups when going to fetch firewood. In addition, since the amount of food ration provided by the WFP has been cut, selling food ration is no longer an option as a head stack of firewood costs a lot more than it used to cost.

Overall, the community was very supportive of the project. Ms. Viola Sida, a 21-year-old South Sudanese refugee mother from Village 9, Zone 3 stated that the IVR phone sensitization was most useful because the message about clean energy was delivered in her local language and she was able to learn that “clay stoves can enable me to avoid too much spending of money throughout the year in buying firewood and charcoal for cooking. Although I have a soil oven, I still use a lot of firewood to cook and this is because I don’t use clay. It is even hard to get clay in this settlement. But through saving, I will be able to buy a new and carriable stove which I can always keep in my house, so that the rain does not spoil it. This I heard from Prisca who works for ANCHOR during community mobilization campaigns in our village.”

Gule Swali Brani is a 39 year old man from Luzira, Yoyo Parish, Kululu Sub County in Yumbe District. He stated that “before this sub county was over populated, we were getting firewood within, but after that, we are lacking firewood. The over population has put a lot of pressure on the small trees we have in Kululu. At this time, we all need the best solutions on how we can give room for the cut trees to grow again. During the sensitization and phone number collection, our local leaders and our children informed us that we were going to receive information about how to save our environment in our local languages. This I have never seen before, usually, the sign posts or billboards have two languages and this becomes hard for us to understand. But this phone call has also been supported by vendors who work for sellers of solar and stoves. These people we did not know that they sold these products. But now we can go to the MercyCorps centre and get more information and pay slowly.”

Alomo Janet is a 28-year old female refugee residing in Village 9, Zone 3 Bidi Bidi Refugee Settlement. She shares her experience using the IVR as follows: “Through attending awareness creation meeting, I shared my number with ANCHOR and they sent information on the importance of solar. After listening to the message, the money I had saved at my work as a tailor I used to buy solar. This solar now lights up my room, helps my young child to study at night and also has reduced on the fear of house burning in the area where I stay. I am very sure that it is better for the whole community to use solar than other local lumps.





11 Annexes

11.1 Data Collected

Table 2 Number of phone contacts and consent letters collected

	Nationals	Refugees	Total
Male	146	373	519
Female	75	406	481
Total	221	779	1000

Table 3 Tabulation of Gender against Age of Respondents

	Age Group of Respondents (Years)				Total
	15-25	26-35	36-45	46+	
Male	156	162	126	75	519
Female	143	192	86	60	481
Total	299	354	212	135	1000

Table 4 Tabulation of demand against type of clean energy products

	Cooking Products	Solar Products
Willing to buy (Total)	55%	65%
Willing and may afford	26%	19%
Willing but can't afford	29%	46%
Undecided	32%	28%
Not willing to buy	12%	5%

11.2 Bidi Bidi Population Factsheet

Click [here](#).

11.3 Messaging script – Approved

Click [here](#).

11.4 IVR Test Report - Viamo

Click [here](#).

11.5 Viamo Airtime Expenditure Schedule

Click [here](#).

11.6 Validation Letters from OPM, LC1, RWC

Click [here](#).

11.7 IVR dashboard Call log

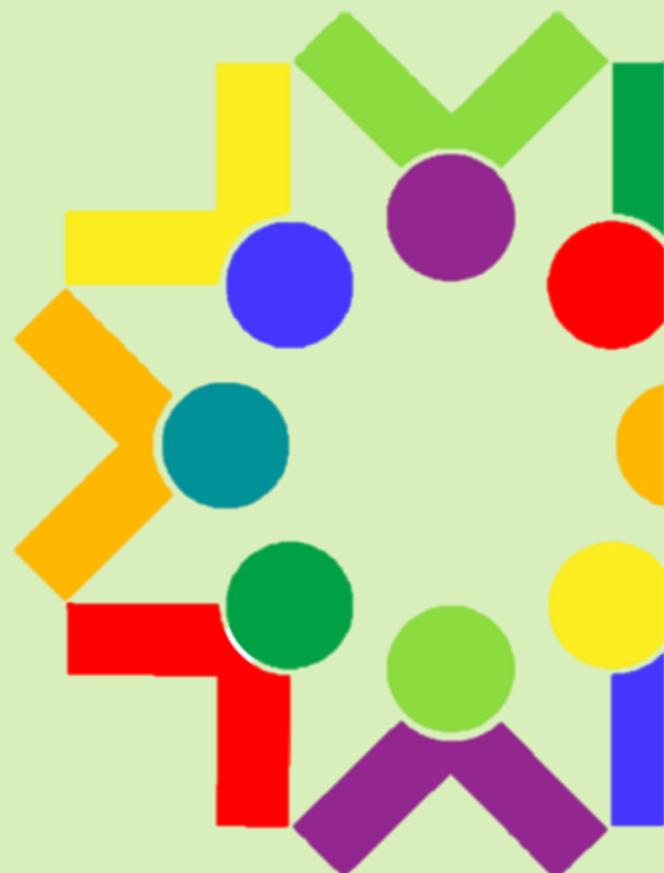
Click [here](#).

11.8 Field Innovation Monitoring tool

Click [here](#).

11.9 End line survey results

Click [here](#).





11.10 Photos



Figure 4 ANCHOR staff interacting with Kumi Kumi vendors in Zone 4



Figure 5 Planning Meeting with Mercy Corps Team

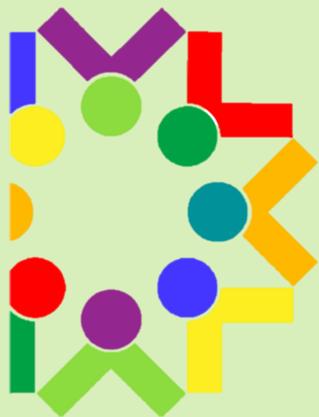
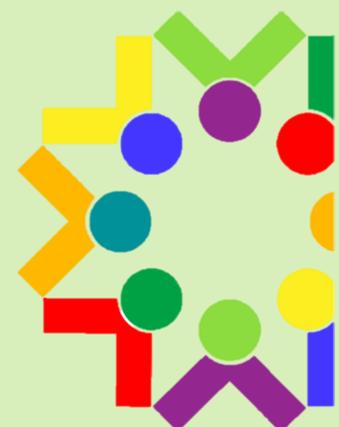


Figure 6 ANCHOR MEL Officer with Yumbe District Environment Officer, Mr. Solomon Andama



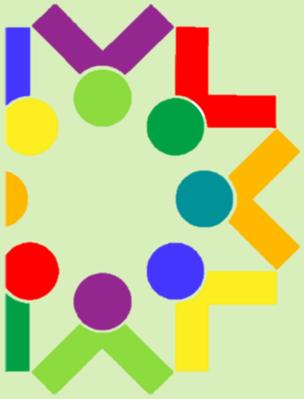


Figure 7 ANCHOR staff interviewing a community member of Village 14



Figure 8 Youths in Luzira Village filling consent forms

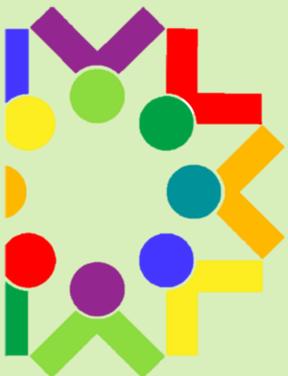
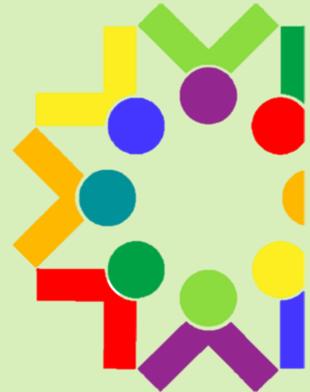


Figure 9 Field Supervision visit at Bidi Bidi Zone 3 by SCI, SNV, and Mercy Corps staff during collection of consent forms