

# ASSESSING THE LANDSCAPE FOR ECONOMIC RESILIENCE THROUGH DIGITAL FINANCIAL INCLUSION OF REFUGEES AND HOST COMMUNITIES IN RWANDA

Presented by:



GiveDirectly



World Vision 

## **Executive Summary**

The introduction of cash-based approaches in lieu of in-kind assistance by humanitarian partners, along with the ongoing and increased provision of refugee identification cards from the Government of Rwanda (GoR), has greatly increased the opportunities for refugees to earn and manage money. Yet, while refugees in Rwanda have the right to work and are gradually being integrated into Rwandan financial, educational and health systems, there remains work to be done to economically include refugees to increase their self-reliance, resilience to financial shock and ability to access and make choices on appropriate financial services.

The extent to which digital finance is currently being leveraged to drive financial inclusion is unclear, as is comprehensive information on the barriers and opportunities that refugees face in being able to access and use digital finance and other digital solutions. It is in this context, with the support of GSMA, that World Vision, ALIGHT (formerly the American Refugee Committee), UNCDF and Give Directly commissioned a research on financial inclusion landscape of refugees in Rwanda, and their surrounding host communities. This report seeks to examine factors that may drive or impede financial inclusion such as mobile phone penetration, digital and financial literacy levels, the types of financial services available and the extent to which they are being adopted.

To achieve the research objectives, the study used a mixed-methods approach including a quantitative survey where representatives of 1,779 households were interviewed (1,179 in refugee camps and 600 in host communities), focus group discussions with 207 participants and 13 key informant interviews.

The research builds on previous research on inclusive digital finance for Rwanda's digital economy and improving financial access for refugees and host communities<sup>1</sup>. The findings complement UNHCR's recent assessment report and strategy outlining a vision for improved livelihoods and economic empowerment for refugee and host communities, which highlights financial inclusion as a priority. The report illustrates that conditions are conducive in refugee and host communities to increase digital financial inclusion and that significant opportunities exist for humanitarian actors, financial institutions and private sector partners to contribute including refugees a sustainable and inclusive digital economy in Rwanda. ►

### **Mobile phone penetration, access and use.**

Mobile phone access is high; though an average refugee household is more likely to own a mobile phone than a host community one.

92% of households in refugee camps own at least one mobile phone compared to 78% in host communities. The differences are statistically significant, though both figures indicate a relatively high level of access. This indicates that for most households, access to a mobile phone handset is unlikely to be a significant barrier to digital financial inclusion through a mobile money service, though as noted below there are gender disparities relating to phone ownership.

### **There is a strong gender dimension to phone ownership.**

Three quarters (75%) of women and 83% of men living in refugee camps own a mobile phone compared to 51% of women and 74% of men in host communities. The gender differences over phone ownership are statistically significant in both communities. Among phone owners, 40% of women and 56% of men in refugee camps have smartphone-type phones. In host communities, overall smartphone ownership is lower; 20% of all women and 36% of all men have smartphones. All gender differences relating to smartphone ownership are statistically significant.

### **Refugees are more likely to own smartphones compared to host community members.**

In refugee camps, at least 45% of household heads (those who completed the questionnaire) own smartphones<sup>2</sup> compared to 34% in host communities. 33% and 26% possess basic phones<sup>3</sup> in refugee camps and neighbouring host communities respectively. The differences are statistically significant.

### **Usage of internet is relatively low.**

Overall, only 23% of refugee camp residents report using the internet, with most of these people reporting using the internet daily or between one and three times per week. Among the host community residents, frequency of usage is well below the refugees with just 13% using internet. Among refugees who own a smartphone, 90% use internet compared to 95% in the host community.

### **Mobile wallet accounts.**

Mobile wallets are used but beyond Person-to-Person (P2P) transfer, savings and micro-loan products remain highly under-utilized. ►

Both mobile national network providers serve both refugee and host communities. Around two thirds of households in refugee camps are registered with a mobile money provider, compared with three quarters of host community households. One in ten households in refugee camps have saved money on their mobile wallet account but no-one reported ever borrowing money from Mobile Network Operators, MNO micro-loan products. Slightly more host community households (13%) have saved money on their mobile wallets compared refugee camps but borrowing money via MNO micro-loan products is non-existent (0%).

**Person to person (P2P) mobile transactions is the most popular mobile money service in refugee and host communities.**

Sending and receiving money accounts for 60% of all mobile wallet services used by households in refugee camps, followed by topping up phone credit (16%) and paying utility bills (9%). The trend is somewhat different in the host community where fewer people (41%) use a mobile wallet to send and receive money but more (17%) use the service to buy phone credit and pay utilities (14%). Deepening uptake of other products and services such as digital loans remains a challenge and addressing these bottlenecks could promote increased inclusion.

**A digital economy is emerging with youth as a key player.**

Qualitative findings based on interviews with MNO agents show that a digital economy is emerging and youths (15-30 years) are taking the opportunity to secure jobs as agents of MNOs and representatives of money transfer services.

**Savings trends**

**Informal saving groups are preferred to other channels.**

Village saving and lending associations (informal saving groups) are the most popular forms of savings in refugee camps (39%) and host community (40%) followed by mobile wallet which is preferred by 19% of households in refugee camps and 13% in host communities. This suggests that in an effort to deepen digital financial inclusion, in the short to medium term, the two channels of saving could be used to build on existing saving behaviors.

**There is a gender dimension associated with various forms of savings.**

There are double the number of women using village savings groups than men in both refugee camp and host communities, suggesting informal groups are an attractive option for women in particular. Gender differences are also noticeable with regard to saving via mobile money (through either network provider), with 17% of men in both communities save money with mobile money compared to 6% of women in refugee camps and 10% in host community. Any programs designed to improve uptake should take a gender sensitive approach. ►

## **Awareness of digital financial services**

Men and host community members are more likely to be aware of digital financial services than women and refugees.

50% of household heads in refugee camps and 55% from host communities are unaware of digital financial services. Awareness was higher among men than women in both refugee and host communities. The differences are statistically significant. ►

### **Mobile wallet/money is the most known digital service.**

MTN's mobile money and Airtel Cash are the most known digital financial service in the refugee camps with 48% of all household heads aware compared to 43% in the host community. Debit and credit cards are known to only 6% of camp household heads compared to 2% in the host community.

### **There is limited exposure to financial services training in both communities.**

Only 12% of household heads in the camps and 9% in the host community have received training in financial services. This is likely to increase in 2020 with the roll out of financial literacy initiatives.

### **There is significant potential to improve financial literacy in both communities.**

The majority of household heads in both communities were able to correctly complete basic addition of financial figures. However in both communities, only one third of respondents could calculate interest on borrowed money and one in ten respondents demonstrated knowledge on how interest is calculated on savings. This suggests that exposure or absorption of financial literacy information is still low.

### **Usage of mobile money to pay utilities still relatively low, but is higher in host community.**

32% of all households in refugee camps and 43% in host communities use mobile wallets to pay energy bills compared with 1% and 5% who use bank payment option in refugee camps and host communities respectively.

42% of households in refugee camps and 55% in host communities have electricity in their homes, indicating that there is potential to increase digital payment volumes should more households have access to electricity. ►

### **Existing financial service providers are perceived to be working for well-established businesses.**

Qualitative findings show that financial education services offered by service providers are perceived to target those with some level of existing business skill.

### **Partners could achieve more synergies between programmes supporting increased digital financial inclusion for refugee populations.**

Interviews with stakeholders showed that the financial inclusion eco-system in Rwanda has attracted many actors but coordination and sharing could be improved to reduce potential inefficiencies. ►

### **Digital financial products and services are emerging which could benefit refugee populations but uptake remains low.**

Qualitative findings also show that new digital products and services are emerging in the marketplace but their uptake is constrained by limited awareness on the part of end users and inadequate linkages between digital financial service providers and end-users.

## **Recommendations**

- Leverage MNOs presence in camps to increase the uptake of micro-saving and loan products, which are currently underutilised, with low awareness reported across the surveyed group. Work to facilitate linkages between the supply side (i.e. financial (digital) service providers) and the demand side – the end user of products (households).
- Target aspiring entrepreneurs with limited experience in business management, with market led skills training, financial education and access to financial support (investment, loans, grants).
- Diversify the livelihood of refugees through market led skills training in productive activities to enhance their financial capacity to save.
- Expand digitization of Village Savings & Loans groups. VSLA are trusted by refugee and host communities. Analysis of transaction data would allow better understanding of refugees' credit eligibility, a key requirement for financial service providers to disburse loans.
- Intensify efforts to increase financial knowledge beyond agents and aspiring entrepreneurs who may have little incentive to disseminate this knowledge.
- Advocate for creation of space for learning and coordination among all actors in the financial (digital) inclusion space to maximise impact and reach.
- Design programmes which are sensitive to how digital financial inclusion impacts women, men, girls, boys and the elderly, and other vulnerable groups. Identify gender and inclusion issues that may arise through promotion of a digital economy and identify mitigation measures. ►

## Conclusions

This research demonstrates that key conditions for digital financial inclusion exist in both refugee camps and host communities. Access to mobile phones is high in both communities, as is the number of households registered on mobile wallet services offered by the two main MNOs.

Close coordination among all actors involved in promoting financial inclusion will be necessary to avoid duplication and wastage of resources. New ideas and financial products are coming into the market. There is a need to scale up integrated initiatives which support refugees to enter the labor market or engage in business within a particular value chain. This could include training on financial management, market led skills training and coaching, supporting refugees to develop new business opportunities in appropriate sectors. This should complement efforts to boost savings capacity and the ability to pay mobile phone-enabled utilities. The savings culture within saving groups can be leveraged to spur uptake of microloan products, which may offer preferential rates and are regulated by the Rwandan authorities.

Digitizing saving groups could also enable members to qualify for micro-loans offered by financial service providers. Under the current “know your customer” requirement, financial institutions are required to have a sufficient credit profile of borrowers before disbursing loans to them. This requires close collaboration between implementing agencies on the ground, financial service providers and regulators. ■

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## Acknowledgement

This report was prepared by Research Hub Ltd on behalf of the KUHl consortium, comprising World Vision, ALIGHT (formerly ARC), GiveDirectly and UNCDF, with support from GSMA. It was authored by Julius Namanya, Kalisa Migisha Claude with contributions from Kayirangwa Beatha and Mary Kayitesi. The authors are grateful to the World Vision team who facilitated MINEMA approval and access for the research team to visit refugee camps and host communities. Special thanks to the key informants, refugees and neighboring communities who shared their views and insights with the research team. Their valuable time and perspectives are sincerely appreciated. ■

## 1.0 Background and context

There are an estimated 150,000 refugees in Rwanda, from neighboring Burundi and the Democratic Republic of Congo. According to the 2019–2020 Rwanda Country Refugee Response Plan, there are 75,740 active refugees from DRC in Rwanda with 74,567 living in five camps (Gihembe, Kigeme, Kiziba, Mugombwa and Nyabiheke), and a further 1,173 residing in urban areas. The country also hosts 69,423 Burundian refugees who fled insecurity and unrest due to the political crisis that engulfed the country in 2015. The majority live in Mahama refugee camp while 12,481 (18%) live in urban areas, mainly in Kigali and Huye.

Commitments by governments to support refugees and host communities under the New York Declaration for Refugees and Migrants known as the Comprehensive Refugee Response Framework (CRRF), and the Government of Rwanda's Strategic Plan for Refugee Inclusion (2019–2024) has given impetus to efforts to increase socioeconomic inclusion for refugee populations and host communities. In line with this commitment, the Government of Rwanda have accorded refugees the right to work, and refugees are steadily being integrated into the country's health and education systems.

Initiatives are being explored by donors and humanitarian organizations to utilize technology to promote increased resilience and self-sufficiency in both refugee and host communities and includes potential digital solutions to humanitarian needs. The World Food Program (WFP) and The United Nations High Commission for Refugees (UNHCR) have introduced digital cash transfer in lieu of in-kind assistance. However, it remains unclear how digital finance is or could be leveraged to drive financial inclusion in the refugee and host communities. This report presents key data around the current knowledge, coverage and potential for increased digital financial services in refugee and host populations in Rwanda. ■

<https://reliefweb.int/sites/reliefweb.int/files/resources/69632.pdf>



## 2.0 Methodology

A mixed methods approach was adopted to generate both quantitative and qualitative data. Household surveys were conducted in each of the six camps, and qualitative data was gathered through Focus Group Discussions (FGDs) with refugees and host communities. Key informants were also interviewed as denoted in Table 1:

### 2.1 Sample size

The enumeration team went to the field with a predetermined target number of households to survey. Targets were designed to ensure 95% confidence level and a margin of error of +-7% at camp level based on the number of households in each camp. The margin of error for all refugee households involved in the survey is +-3% and for host community households it is +-4%.

*Table 1: Sample size by camp and host community*

Method	Mugombwa	Kiziba	Kigeme	Gihembe	Nyabiheke	Mahama	Total
Household survey (camps)	189	201	201	187	203	198	1,179
Household survey (host community)	100	100	100	100	100	100	600
FGDs (adults)		8	8	8			24
FGD (youth)	8			10			18
PWDs	9			8	11	8	36
FGDs (Host community)	18	21	18	12	22	8	99
KIIs							13
Total	324	330	327	328	333	314	2,556

### 2.2 Sampling strategy

For confidentiality reasons, the survey team could not obtain lists of households from which to draw a random sample and as such created a sampling approach with information at their disposal. Firstly, the target number of interviews in each camp were divided amongst each 'quarter' (with larger quarters allocated a greater share of the target based on the number of villages in each). Within a quarter, every village had the same number of target interviews. ►



The enumeration team then allocated numbers to specific points with each village and using a random number generator, established the starting point. From this point, enumerators moved in one standard direction and sampled every fifth household. If a respondent was not at home at the time of enumeration, the enumerator revisited the household at least three times, after which permission to move to the next household was sought from the field supervisor.

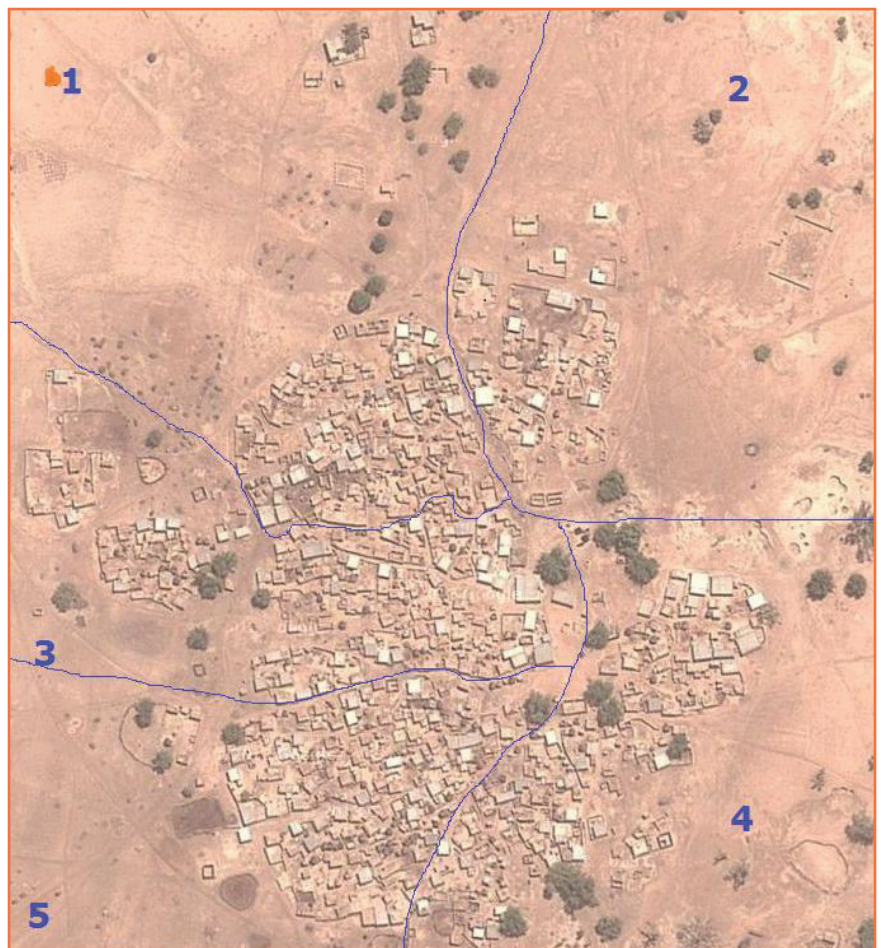
For sampling purposes, host communities were defined as administrative villages sharing common borders with all the 6 camps. Based on information shared with the research team, there were 20 such villages. Each village was allocated a target sample of 30 to achieve the overall target of 600. On the ground, the enumeration team worked with the village leaders to establish the center of the village which acted as the starting point from where enumerators moved in a standard direction sampling every 5th household until the required sample was reached.

The sampling of FGD and KIIs on the other hand specifically targeted organizations involved in financial inclusion as determined through desk review and referral from the World Vision team and key informants. On the ground, mobilization of FGD participants was done by the World Vision field team who introduced research mod-

erators to the representatives of refugees. The WV field team assisted in identifying respondents with the required profile. Discussions typically lasted one hour and were facilitated in Kinyarwanda, the language spoken by both refugees and facilitators. FGD facilitators used interview guides developed and approved by the client as part of the inception report (see annex).

For key informants, the respondent was determined by the institution who upon being presented with an introductory letter from World Vision, identified the most relevant person within their teams to talk to the qualitative researcher. ►

FIGURE 1: Determination of the starting point within the camp



### **2.3 Desk review**

The study benefited from other relevant pieces of research done by different agencies including GSMA (2019), UNCDF (2019), Access to Finance (2016), Access to Finance and UNHCR (2018), Ministry of finance and Economic Planning (2013), Ministry of Emergency Management and UNHCR (2016-2018) among others. Issues identified in these studies informed the design of the tools and helped to identify key informants.

### **2.4 Key informant interview**

Key informants included representatives of humanitarian NGOs, mobile network operators, financial service providers, energy service providers among others. The list of specific agencies that were consulted is given in the annex. Key informant interview questions approved by the consortium guided the discussion.

### **2.5 Data analysis**

Analysis involved production of descriptive statistics and cross tabulations of key variables of interest. Qualitative data obtained from FGDs and KIIs helped to triangulate quantitative data collected from households. Where frequencies and percentages were derived from a subpopulation to whom particular questions were relevant, rebasing was done using overall base sample in order to get population level estimates.

### **2.6 Research Limitations**

Sub-group representations. The sample was representative at the household level in refugee camps, and indicative in the host population at household level. The interviewee was the head of the household or their spouse. There was no demographic stratification as this would have required a notably larger sample to ensure representation within each group of interest. No demographic quotas were set up at camp level either, due to the proportions of male and female headed households in both refugee and host communities not being known at the start of data collection. However, the proportions interviewed (69% women vs 31% men) were close to population level estimates of household headship in refugee camps (67% women vs 33% men) according to figures obtained from UNHCR later, in a separate study. Host community data was not available. The findings are thus representative up to the level of the household, and for male and females but not for other demographic groups such as youth or persons with disabilities.

### **3.0 Findings of the study**

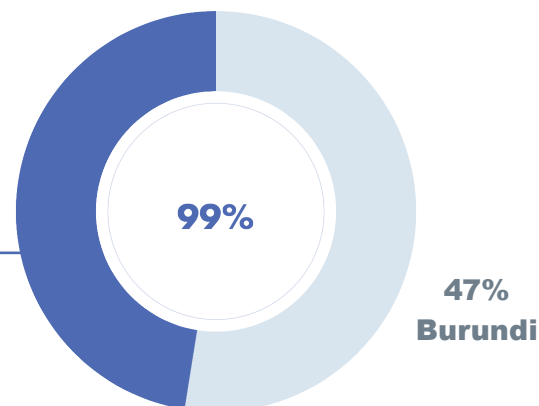
This section covers the main findings of the study and where appropriate, a comparison between refugee camp and host community populations, and male and female respondents is made. Reflections and conclusions are drawn at the end. ►

### 3.1 Demographic profile of the refugee and host communities

As of September 30th, 2019, Rwanda was home to 149,212 refugees (UNHCR 2019), the majority of whom were from DRC (52%) and Burundi (47%) (GSMA 2018). Refugees are settled in six camps spread across the country. Five of the camps (Kigeme and Mugombwa in the South of Rwanda, Kiziba in the West, Gihembe in the North and Nyabiheke in East) host refugees from DRC whereas Burundi-an refugees reside in Mahama camp in Eastern Rwanda. There are additional refugees living in urban centers who were not part of this study.

*Refugees in Rwanda, as of September 30th 2019*

# 149,212 Refugees



52%  
DRC

47%  
Burundi



FIGURE 2:

## Refugee Camp Locations

Credit: UNHCR (2019)

#### 3.1.1 Gender of the respondents

In both refugee camps and host communities, the sample was skewed towards females, who constituted 69% of the overall sample, compared with 31% of males. As the study was targeting the household heads, women were the likeliest to be interviewed as women in all camps (except Mahama) are most likely to be the heads of households (67%), compared to 33% of men, according to UNHCR internal data. Men often were not found at home and most of those present referred enumerators to their spouses who act as the custodians of the electronic cash transfer card. ►

### 3.1.2 Refugees country of origin

The refugee sample consisted of 1,179 respondents, 83% and 17% of whom are of Congolese and Burundian origin respectively. The majority (97%) of refugees have been in Rwanda for at least 4 years. Refugees from DRC are hosted in Kigeme, Gihembe, Mugombwa Kiziba and Nyabiheke refugee camps. Mahama hosts 95% of recent arrivals (within the past five years). The median number of household size is six members in refugee camps compared to five in host communities.

### 3.1.3 Disability status

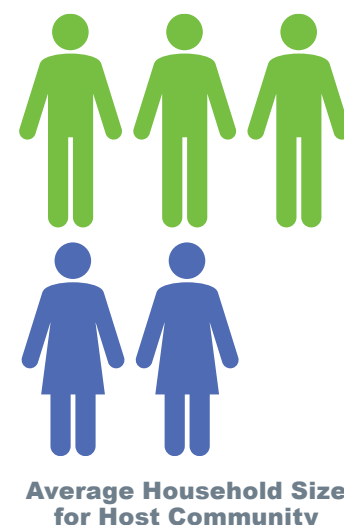
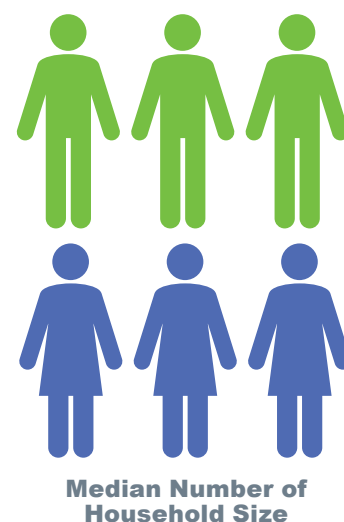
Nearly 5% of respondents described themselves as having some form of disability. Among those reporting that they had some type of disability, majority were women (55%) compared to men (45%). The most common types of disability were difficulty walking (71%), difficulty hearing (13%), difficulty communicating (10%), difficulty seeing (9%) and memory difficulties (1%).

### 3.1.4 Age and education levels of respondents

The median age of respondents was 36 years among refugee communities compared to 35 years for host communities. About 30% of respondents had no education with refugee communities having a higher (33%) percentage of respondents with no formal education compared to host communities (23%).

### 3.2 Mobile phone trends

Findings suggest that the mobile phone is ubiquitous in the lives of both refugees and host communities. 86% of all households in the camp and host communities have at least one mobile phone. For every household in the refugee camp, there are at least two (2) mobile handsets (median) compared to one (1) handset in the host community. The percentage of households with at least one phone is higher (92%) in refugee camps than in host communities (78%)<sup>3</sup> and the differences are statistically significant according to Pearson chi-square test results (P-value of 0.000). Household ownership of phones is higher in Gihembe (97%), Mugombwa (95%) and Nyabiheke (95%) compared to Mahama where 79% of households own a mobile phone. ►

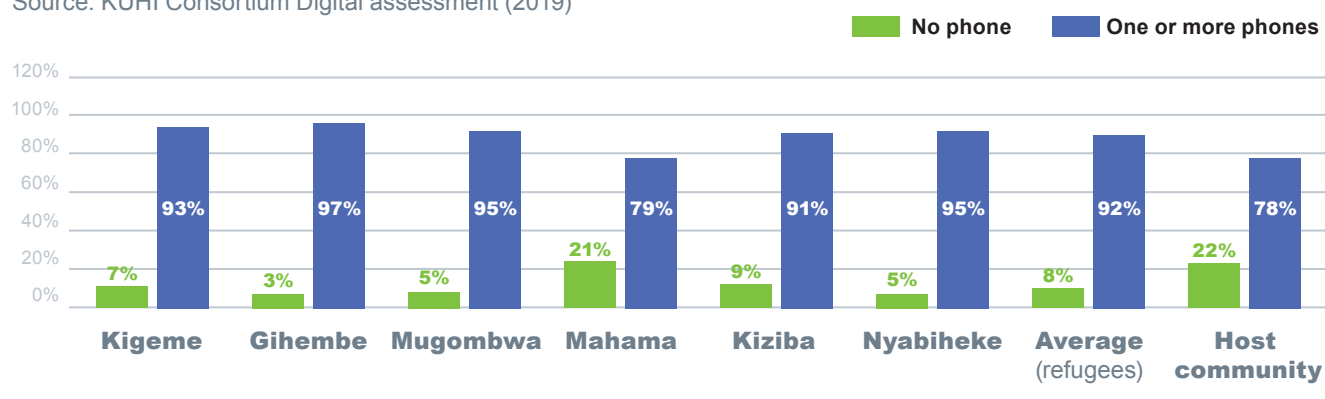


<sup>2</sup>The prevalence is based on respondents answering yes to the question “Do you have any form of disability?” of those answering yes to the question, they were asked to state the type of disability they had. While Washington Set of Questions answer options were used, they were not asked the same way. The type of disability were not read out to the respondents. This was done to minimize social desirability.

<sup>3</sup>Note that this metric is only concerned with household possessing a mobile device even if not all members may own one.

FIGURE 3: Percentage of households with at least one or more mobile phones

Source: KUHI Consortium Digital assessment (2019)



### 3.2.1 Access to mobile phones

Among households with no phone, at least 11% (11/99) in refugee camps and 22% (30/134) in the host communities do have a sim-card. Within the entire population surveyed, 1% of all refugee camp households reported some access to mobile services via owning sim-card only, compared to 5% in the host communities.

Total access to mobile services (defined as household possessing a mobile phone or sim card) is 93% in refugee camps compared to 83% in host communities. Gihembe refugee camp has the highest access to mobile services (98%) while Mahama has the lowest (81%). Mobile network operators do not capture the distinction between refugees and host community members while onboarding and registering them. As a result, it is difficult to delineate refugees from the rest of the population within their customer database. The household survey is the only source of information on mobile phone access for the refugee segment.

TABLE 2: Households with access to mobile phone

Source: KUHI Consortium Digital assessment (2019)

Location	Base sample	Households with at least one phone	Households with sim-card but no phone	Overall access
Kigeme	201	93%	0%	93%
Gihembe	187	97%	1%	98%
Mugombwa	189	95%	1%	96%
Mahama	198	79%	2%	81%
Kiziba	201	91%	2%	93%
Nyabiheke	203	95%	1%	96%
Average		92%	1%	93%
Host community	600	78%	5%	83%

<sup>4</sup> Derived from respondents reporting that they do have zero phone in the household and yes to having sim card



### 3.2.2 Gender and mobile access

On an individual level, of respondents surveyed, mobile phone ownership is 77% (912/1,177) across all refugee camps compared to 60% (359/600) in host communities. More men (83%) own mobile phones compared to women (75%) with gender differences statistically significant according to Pearson chi-square test results (P- value of 0.004). Mahama has the lowest (58%) number of household heads owning mobile phones compared to other camps notably Mugombwa (88%) and Gihembe (87%).

TABLE 3: Percentage of households with at least one head of household owning a phone, disaggregated by sex

Source: KUHI Consortium Digital assessment (2019)

Location	Base sample	Percent (%)	Male	Female
Kigeme	201	85%	88%	84%
Gihembe	187	87%	90%	86%
Mugombwa	189	88%	85%	88%
Mahama	198	58%	74%	46%
Kiziba	201	68%	82%	61%
Nyabiheke	203	80%	91%	77%
Average (all camps)		78%	83%	75%
Host community	600	60%	74%	51%

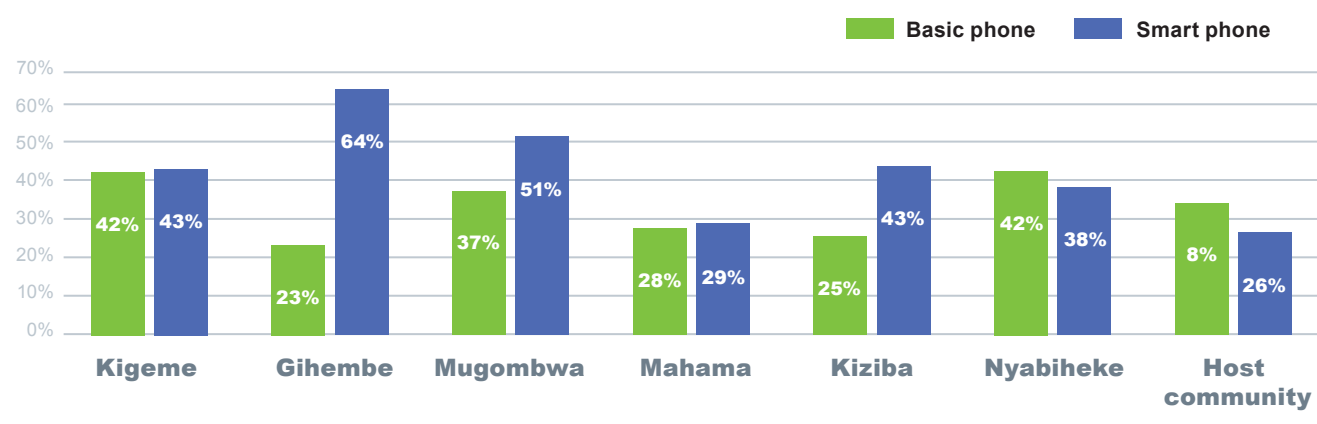
Among respondents who reported that they own a mobile phone, 54% had smartphones compared to 46% who had basic phones. Overall, 45% of all refugee camp households and 34% in the host communities have household heads with smartphones. Pearson chi-square test results show that differences between refugees and host communities are statistically significant (p-value of 0.000). Camp agents engaged in the qualitative piece of the study confirmed that a sizeable number of their clients have smartphones.

*“Around 40% of my client’s own smartphones but mostly below 40 years old”*

*Source: Interview with a male youth mobile agent. Mugombwa refugee camp.*

**FIGURE 4: Percentage of household heads with basic and smartphones**

Source: KUHI Consortium Digital assessment (2019)



Gihembe has the highest percentage (64%) of households with at least one smartphone, followed by Mugombwa (51%), Kiziba and Kigeme (43%). Overall, 82% of household heads in all the refugee camps and 68% in the neighboring host communities have sim-cards. Among female refugees owning phones, 53% have a smartphone, relative to 68% of male spouses in the same community who have similar phones. In the host communities, 39% of females with phones have smartphones compared to 49% of men in the same community who own the same type of phones.

**FIGURE 5: Percentage of respondents with sim cards**

Source: KUHI Consortium Digital assessment (2019)

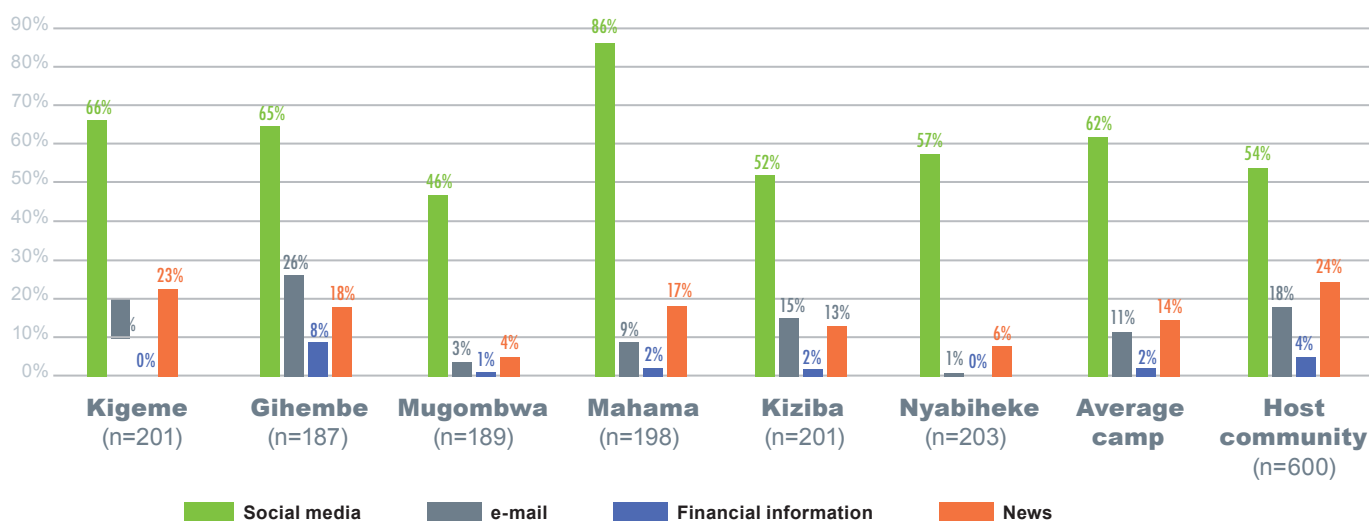
Camp	Base sample	Both male and female	Male	Female
Kigeme	201	88%	90%	87%
Gihembe	187	88%	93%	86%
Mugombwa	189	90%	91%	90%
Mahama	198	65%	80%	54%
Kiziba	201	74%	85%	69%
Nyabiheke	203	87%	95%	84%
Average		82%	88%	80%
host community	600	68%	77%	62%

### 3.2.3 Usage of smartphones

Among refugees and host communities, the most accessed applications or content are social media platforms – Facebook and WhatsApp (62% in refugee camps against 54% in host communities) and news (14% in refugee camps vs 24% in host communities). Mahama has a higher percentage of respondents using social media relative to other camps. Only 19% of respondents in all camps do not use these applications on the phone. The rest (81% of camp residents and 85% of host community members) reported using these applications.

FIGURE 6: Applications accessed/used by refugees and host community members

Source: KUHI Consortium Digital assessment (2019)



### 3.2.4 Frequency of internet use

Among refugee camp residents, just under 90% of residents with smartphones use internet either daily (42%) or 1-3 times a week (47%) whereas 11% reported using it “a few times a month”. In the host community, 95% of all residents owning smartphones either daily (59%), 1-3 times a week (36%) whereas 5% use it “a few times a month”. Overall, only 23% of refugee camp residents use internet either daily (10%), 1-3 times a week (11%) and a few times a month (2%). Among the host community residents, frequency of usage is well below the refugees with just 13% using internet either daily (7%) or 1-times a week (5%), a few times a month (1%). The average expenditure also varies among refugee camp residents but 80% of those using internet enabled phones reported using between Rwandan francs 100-2000 a month 13% less than the host community members using the same amount of money in a month. Internet usage is still modest but with tailored products, there is potential to increase the number of households consuming internet content via their mobile phone handsets. ►

### **3.2.5 Mobile network operators**

The Rwandan mobile telecommunication market is dominated by two operators, Mobile Telecommunication Network (MTN) Rwanda and Airtel Rwanda which merged with Tigo in early 2018. Coverage in refugee camps is relatively good, and a network of mobile network agents exists. There is opportunity however for both MNOs to expand reach of existing services (such as mobile money, savings and microcredit options) and tailor services for refugees.

There are also agents across the country down to the Cell level who serve host communities in the surrounding of refugee camps. Services offered by these agents vary from selling airtime to allow mobile money users to cash-in and-out money and also recruiting new subscribers through selling sim cards and facilitating sim card registration.

### **3.3 Mobile money account trends**

High mobile phone penetration has opened doors for many households to do financial transactions such as sending and receiving money, buy essential goods and paying utility bills. Among refugees, 82% of all households are registered on mobile money with their service provider.

Mahama refugee camp has the lowest percentage of households registered on either MTN mobile money or Airtel Money. The reason given for no registration include lack of necessary documentation, no added value especially for those already registered on another network. MTN estimates that, across all six refugee camps where agents are present, about 30% of refugees are denied their services (i.e. purchase and register a sim card) because they lack identification documents, also known as refugee ID. However, the Ministry of Emergency Management has since addressed this problem with the issuance of refugee IDs. It may be that some refugees are yet to acquire them, or that a perception of a barrier to access remains – rather than an actual barrier.

#### **3.3.1 Frequency of using mobile money accounts**

The study collected data on frequency of using mobile money services among refugees and host communities to better understand the trends. Findings show that among refugees, 62% of households use mobile money services either daily (1%), 1-3 times a month (20%) once a month (32%), once a week (2%) or other (8%). ►

TABLE 4 Frequency of mobile money usage

Source: KUHI Consortium Digital assessment (2019)

Frequency of using Mobile Money month	Base sample	Daily	Once a week	1-3 times a month	Once a month	Other
Kigeme	201	0%	1%	33%	33%	6%
Gihembe	187	4%	3%	18%	48%	4%
Mugombwa	189	3%	2%	18%	43%	7%
Mahama	198	0%	1%	6%	13%	9%
Kiziba	201	1%	0%	16%	33%	7%
Nyabiheke	203	0%	2%	29%	20%	14%
Average camp		1%	2%	20%	32%	8%
Host community (n=600)	600	4%	3%	20%	20%	5%

### 3.3.2 Mobile money services used

Sending and receiving money between people, otherwise known as person to person transactions (P2P) is the most frequently used mobile money service accounting for 60% and 41% of all mobile money services in refugee camps and host communities respectively. This is followed by airtime top-up (16% in refugee camps and 17% in host communities) and paying utility bills. Mugombwa and Gihembe have the most active mobile money service subscribers with 77% and 72% sending or receiving money. Mahama has the least active users with only 26% of all households sending or receiving money on their mobile money accounts.

TABLE 5 Most frequently used mobile money services

Source: Source: KUHI Consortium Digital assessment (2019)

Mobile money services used	Base sample	Sending & receiving (P2P)	Airtime top up	Paying utility bills	One
Kigeme	201	67%	22%	10%	3%
Gihembe	187	72%	24%	19%	2%
Mugombwa	189	77%	21%	7%	4%
Mahama	198	26%	3%	1%	5%
Kiziba	201	56%	22%	3%	5%
Nyabiheke	203	62%	7%	13%	6%
Average camp		60%	16%	9%	4%
Host community	600	41%	17%	14%	4%

The amount of money sent or received varies across camps but only 1% receive in excess of one hundred thousand Rwandan Francs (RWF 100,000) per month, the same as in the host communities. ►

TABLE 6: Amount of money received by households in a month

Source: Source: KUHI Consortium Digital assessment (2019)

Amount received	Kigeme (n=201)	Gihembe (n=187)	Mugombwa (n=189)	Mahama (n=198)	Kiziba (n=201)	Nyabiheke (n=203)	Average	Host community (n=600)
Less than 5000	40%	28%	26%	10%	30%	18%	25%	26%
5001-10000	27%	25%	24%	7%	19%	13%	19%	11%
10001-20000	2%	14%	11%	6%	4%	11%	8%	9%
20001-30000	1%	4%	3%	4%	5%	5%	4%	3%
30001-40000	1%	4%	3%	3%	1%	5%	3%	1%
40001-50000	2%	1%	4%	3%	0%	8%	3%	1%
50001-60000	1%	0%	0%	0%	0%	5%	1%	1%
60001-70000	0%	0%	0%	0%	0%	1%	0%	0%
70001-80000	0%	0%	0%	0%	0%	0%	0%	0%
80001-90000	0%	1%	0%	0%	0%	0%	0%	0%
90001-100000	0%	0%	1%	0%	0%	0%	0%	0%
above 100000	0%	2%	5%	1%	0%	0%	1%	1%

The source of money transferred via mobile money is largely cash transfer from UN agencies (UNHCR and WFP) which accounts for 41% of all mobile money received by households. Agriculture accounts for zero percent of money sent through via mobile communities in refugee camps compared to host communities where it accounts for 11%.

TABLE 7: Source of money received via mobile by location

Source: KUHI Consortium Digital assessment (2019)

Location	Base sample	Cash Transfer with salaried job	Cash Transfer with remittance	Cash Transfer with odd job or self employment	Cash Transfer with agriculture	Cash Transfer only	Salaried job only	Odd jobs/ self-employment	Remittances only	Agriculture only
Kigeme	201	1%	3%	5%	0%	49%	1%	0%	11%	0%
Gihembe	187	6%	25%	6%	0%	35%	0%	5%	4%	0%
Mugombwa	189	3%	2%	4%	1%	67%	1%	3%	2%	1%
Mahama	198	1%	4%	2%	0%	18%	0%	1%	7%	0%
Kiziba	201	8%	15%	3%	0%	34%	0%	1%	3%	0%
Nyabiheke	203	2%	7%	3%	0%	43%	0%	3%	15%	0%
Average camp		3%	9%	4%	0%	41%	0%	2%	7%	0%
Host community	600	3%	2%	3%	3%	9%	3%	14%	3%	11%

### **3.4 MNO's readiness to expand into refugee camps and host communities**

MTN has 99% coverage across the country including in all six refugee camps and have a countrywide network of agents up to the village level. As far as refugees are concerned, MTN Rwanda estimates that there are about 100 agents per each camp. Airtel also has strong coverage across the country and are closely monitoring refugees as a segment where they could potentially offer more services and products.

At present, existing products, such as MTN's Mokash<sup>5</sup> product could have potential to serve the financial needs of both communities if promoted as a saving and loan product – where it is possible to save very small amounts and build a credit history. There is an opportunity for MNOs to develop and expand products for refugees.

### **3.5 Discussions and reflection on mobile trends**

The research findings reveal that the environment is conducive for deepening financial inclusion in host communities and refugee camps. Most households have access to mobile phones, are registered on mobile money accounts, and are active in terms of sending and receiving money using digital platforms. Smartphones are becoming more prevalent, increasing the potential for increasing exposure to digital content. High network coverage is another boost to efforts aimed at driving digital financial inclusion. MNOs and other players, notably banks, are developing relevant products whose uptake remains low, but has implications for actors in the digital financial inclusion space. Firstly, as the supply side constraints are improved and new products such as Mokash, Ikofi (Bank of Kigali) are brought to the market, the constraints on the demand side may need to be addressed. Demand for the products may be low due to low awareness and structural and operational issues that still need to be identified and resolved.

Secondly, in a context where internet-enabled phones are becoming ubiquitous, there is an opportunity to push relevant content digitally using platforms such as Facebook, or dedicated apps. Thirdly, a digital economy is developing due to high mobile connectivity. Youth are taking advantage of the emerging opportunities in the digital economy through becoming agents of MNOs and money wire transfer services. It remains to be seen how these developments affect or are affected by gender roles and age among other demographic factors. Preliminary insights suggest that the digitization of services may be having varying outcomes for youths, women, elderly, among others, and further exploration may be required to examine this. ►

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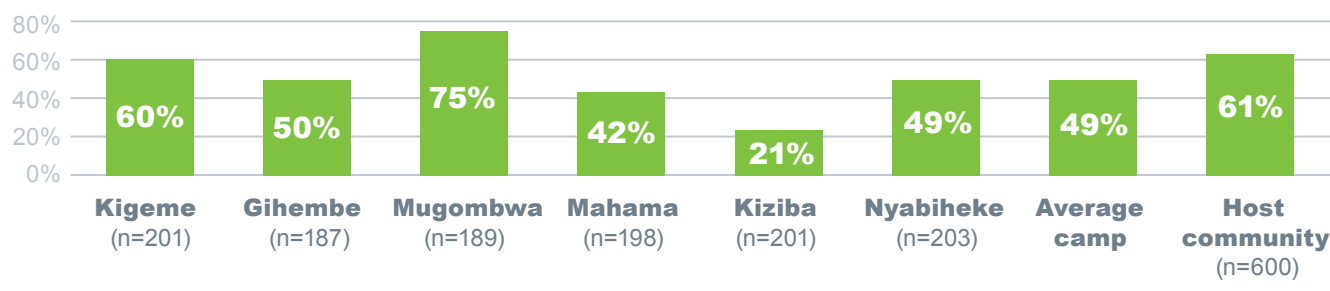
<sup>5</sup>A digital saving and micro-loan product developed by Commercial Bank of Africa and MTN that allows MTN subscribers to save and get micro-loans based on credit history.

### 3.6 Savings trends

Despite having limited livelihood activities that generate money, just under half of households (50%) save money at the end of the month. Mugombwa (75%) has the highest number of households regularly saving money whereas Kiziba (21%) has the lowest. Mahama which hosts recent arrivals, has a sizeable percentage (42%) of households saving monthly. In all the host communities, monthly savings is as high as 61% among all households.

FIGURE 7 Percentage of respondents who save at the end of the month

Source: KUHI Consortium Digital assessment (2019)



There are relatively few companies currently targeting refugees as a specific market demographic. The UFC company (see case study in Box 1) has shown interest in targeting refugees as a segment. This may see more refugees saving with non-village saving and credit lending schemes. Informal savings and credit groups are the most popular choices when it comes to saving in both refugee camps and host communities. Approximately 39% of all households in the camps save money with informal saving groups, with approximately the same coverage (40%) in the host communities. Mugombwa (68%) and Kigeme (50%) have the highest proportion of households saving with informal groups. Use of Mobile money as a saving channel is preferred by only 9% of households in refugee camps and 13% in host communities. ■

<sup>9</sup>A digital saving product developed by Bank of Kigali and targets farmers and agro-dealers. Enlisted clients can digitally pay for fertilizers and other services and potentially get loans based on their transaction history have the highest proportion of households saving with informal groups. Use of Mobile money as a saving channel is preferred by only 9% of households in refugee camps and 13% in host communities.

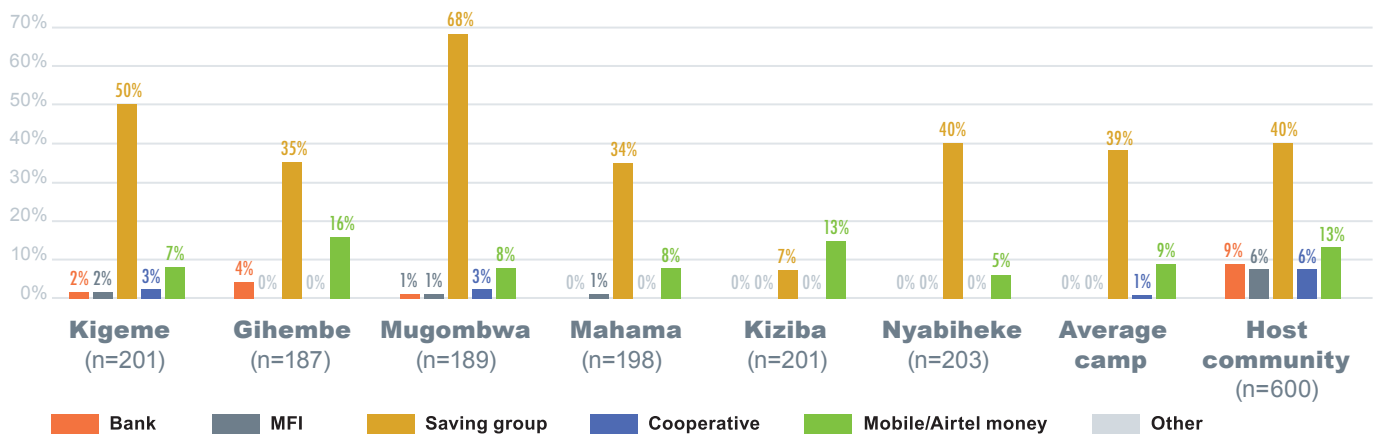


## Box 1: Case Study: Umutanguha Finance Company

Umutanguha Finance Company LTD is Microfinance company operating in Rwanda with seven branches across the country. In 2018, they partnered with Access to Finance Rwanda (AFR) and FSD Africa to rollout a pilot project aiming at providing financial services such as loans and banking to refugees residing in Mahama and Kigeme camps. Over the past two years, the cumulative total of savings by refugees in both camps was 21,000,000 Rwf (October 2019). In addition, loans totaling 13,500,000 Rwf were disbursed to refugees venturing into small businesses such as restaurants, small shops, hair and beauty salons. These are collateral-free loans that are to be repaid in 6 months. Bank accounts opened by refugees, to date, are 335 and 95 in Kigeme and Mahama respectively. The Microfinance branch close to the Kigeme camp (located in the nearby town of Gasarenda), has three loan officers ready to serve refugees and host committees, and the information desk in Mahama is operated by one individual, which may explain the difference in the number of bank accounts opened in each site. According to Umutanguha, proximity of financial services providers to targeted populations is key to the uptake of financial services. The institution nonetheless operates outside the camp and this could be a bottleneck to access. ■

FIGURE 8 Preferred saving channel among refugees and host communities

Source: KUIH Consortium Digital assessment (2019)



The popularity of informal saving groups cuts across refugee and host communities. Key informants revealed that in some cases, refugees join saving groups operating from outside the camps i.e. from the neighboring communities. Whereas their interest rate is generally high (5%) per month, relative to 1.4% charged by the Inkomoko product and 1.9% by Umutanguha, most households report a preference for informal saving groups over formal financial institutions. Borrowers do not need to fill out extensive paperwork, travel miles to the nearest trading center where financial institutions are located or wait for processing. The process is instantaneous and is built on the trust members have with each other. ►

*“Everyone in the camp has a saving group based on his/her capacity to solve unpredicted financial issues”*

*Source: Female disabled person,  
Kigeme refugee camp*

### 3.6.1 Borrowing trends

Given the gap between the cash transfer disbursed by UN agencies and average cost of living, in addition to a perceived high cost of borrowing from financial institutions, saving groups provide a lifeline to households in financial distress. Whereas participants in FGDs revealed that without credit most households would struggle to take care of their basic needs, the data from this survey indicated that only 29% of all households in the camp reported that they have ever applied for loan, which is only 4% higher than the 25% reported by host community households. Loan applications vary widely between camps; Mugombwa (54%) and Kigeme (48%) refugee camps have higher rate of households applying for loans compared with Kiziba and Mahama where borrowing is 6% and 14% respectively. Among refugees that applied for loans, 98% received a positive response from the lender, 1% higher than the host community where 97% of all loan applicants were successful.

TABLE 8: percentage of households that have ever applied for credit by location

Source: KUHI Consortium Digital assessment (2019)

Have you applied for a loan	Base sample	Percent
Kigeme	201	48%
Gihembe	187	23%
Mugombwa	189	54%
Mahama	198	14%
Kiziba	201	6%
Nyabiheke	203	27%
Average camp		29%
Host community	600	25%

In terms of source of credit, 27% of all households in refugee camps obtained credit from the saving groups which is more twice those accessing credit in this manner from the host community. Other borrowing channels such as formal financial institutions and mobile money appear to be less popular especially in refugee camps where between 0 and 1% have used other available options. This presents an opportunity, especially for MNOs, which have the potential to leverage high penetration to increase their loan portfolio. ►

TABLE 9: Percentage of adults borrowing money from various sources

Source: KUHI Consortium Digital assessment (2019)

Location	Base sample	Bank	MFI	Family/friends	Community savings group	Informal money lenders	Mobile money	Other	SACCO
Kigeme	201	0%	3%	4%	42%	0%	0%	0%	0%
Gihembe	187	0%	0%	0%	22%	0%	1%	1%	0%
Mugombwa	189	0%	1%	1%	54%	0%	0%	0%	1%
Mahama	198	0%	0%	0%	13%	0%	0%	0%	0%
Kiziba	201	0%	0%	0%	6%	0%	0%	0%	0%
Nyabiheke	203	0%	0%	0%	26%	0%	0%	0%	0%
Average camp		0%	1%	1%	27%	0%	0%	0%	0%
Host community	600	3%	7%	1%	13%	0%	0%	3%	0%

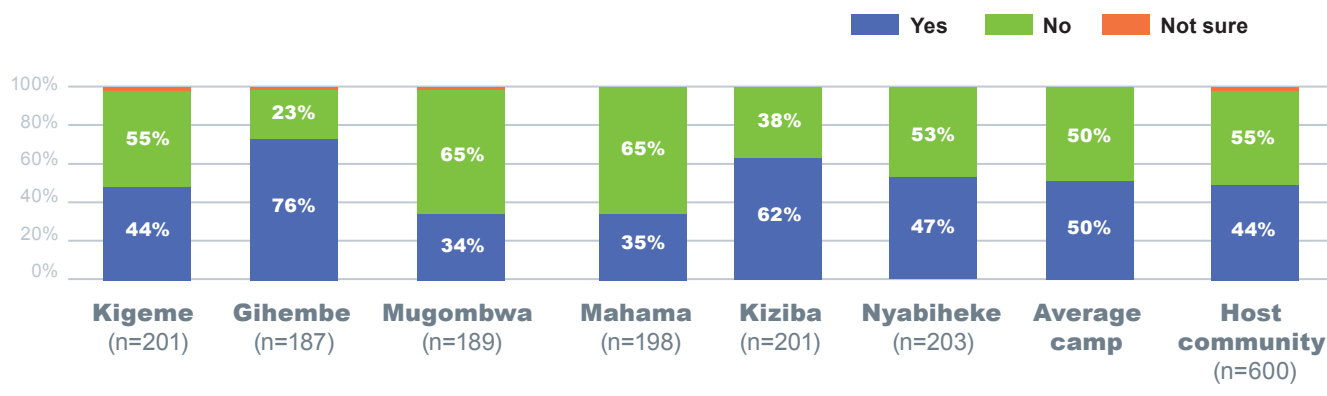
### 3.7 Knowledge of financial services

Among the refugees, 50% are unaware of digital financial services compared to 56% in host communities who are also unaware (55%) or not sure (1%). This may indicate a poor understanding of the question asked, as 60% of households report using P2P transfers, which is a digital financial service.

Gihembe (76%) reports the most awareness of digital financial services, while Mugombwa (34%) and Mahama (35%) have the least awareness levels of all refugee camps. Among refugees, awareness is higher (62%) among males compared to females (45%) whereas in the host community it is 59% among males compared to 35% for females. The gender differences in terms of digital financial services awareness are statistically significant (=p-value of 0.000) in both communities. ►

FIGURE 9: Percentage of households who are aware of digital Financial services

Source: KUHI Consortium Digital assessment (2019)



When probed further to specify digital financial services they were aware of, 48% of households in the camps indicated that they know of mobile money, 5% higher than the rate of awareness in the host communities. Other financial services such as online banking, debit/credit cards are not broadly known among households in the surveyed communities. Similarly, services such as digitally paying for government services via Irembo or receiving remittances via digital channels remain relatively unknown, particularly among refugees.

TABLE 10: Awareness levels of different digital financial services and platforms

Source: KUHl Consortium Digital assessment (2019)

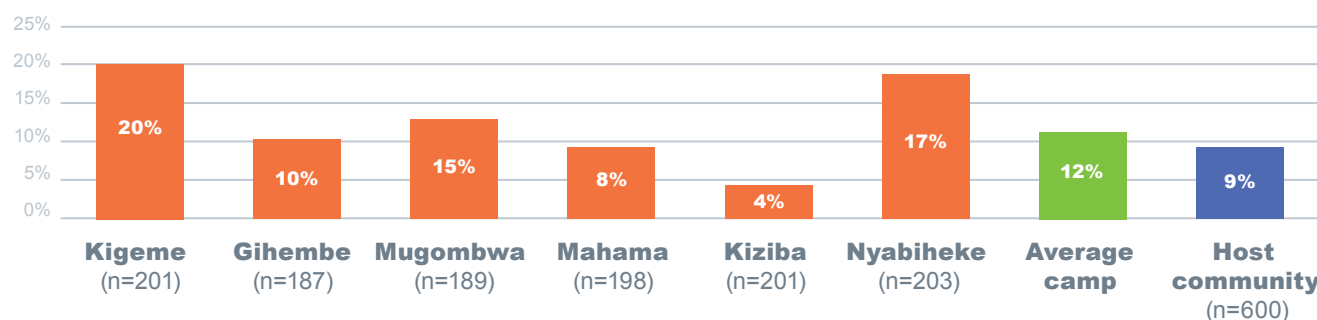
Location	Base sample	Mobile money	Remittances	Debit/credit card	Online banking	Irembo
Kigeme	201	43%	5%	2%	2%	0%
Gihembe	187	74%	16%	10%	1%	1%
Mugombwa	189	33%	4%	0%	0%	0%
Mahama	198	33%	7%	1%	6%	0%
Kiziba	201	60%	13%	18%	2%	1%
Nyabiheke	203	47%	6%	3%	4%	0%
Average camp		48%	9%	6%	3%	1%
Host community	600	43%	4%	2%	5%	7%

### 3.7.1 Exposure to financial services training

One reason for comparatively low awareness of digital financial services could be due to limited exposure to financial information. Only 12% of households in camps and 9% in host communities report that they have been exposed to financial information. This may be due to a focus for training of entrepreneurs and those looking to start businesses, rather than broad financial literacy training being targeted at households for everyday management of household finances. This was reported as a perception in the qualitative exercise, where interviewees reported a perception that entities providing financial education mostly targeted businesspeople.

FIGURE 10: Percentage of refugee and host community members receiving training in financial services

Source: KUHl Consortium Digital assessment (2019)



*“Inkomoko gave us training on how to start and manage a small business and we sent our projects but they only gave loans to people with well stable and established businesses”*

Source: Male respondent in Nyabiheke refugee camp

### 3.7.2 Financial Literacy

As part of assessing financial literacy of households, respondents were given three basic arithmetic questions to test their knowledge of basic summation, calculating interest payable on borrowed money and interest earned on savings. The questions were phrased as follows; 1) Imagine you are a family of 5 people and each month you all receive Rwandan Francs 10,000, How much in total does your household receive at the end of the month? 2) Imagine you borrow 100,000 RWF from a bank at 10% interest rate per annum. How much will you pay the bank at the end of the year? And 3) suppose you put Rwandan francs 1,000 in a savings account with a guaranteed interest rate of 5% per year, if you don't make any further payments into this account and you don't withdraw any money, how much will be in the account at the end of the first year once the interest payment has been made?

#### **Box 2: Case Study: Inkomoko Business Development Services**

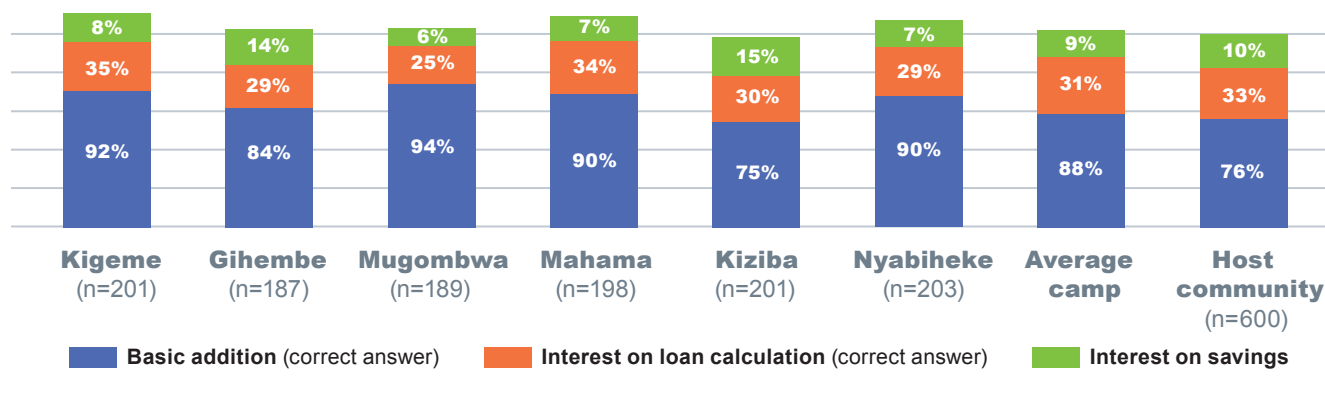
Inkomoko – The Rwandan affiliate of African Entrepreneur Collective (AEC), a US-based network of accelerators that offer business education, consulting, and access to affordable capital to support entrepreneurs has joined hands with Equity Bank Rwanda. Through training on financial literacy that covers aspects such as bookkeeping and inventory management, Inkomoko attracts entrepreneurs from both refugee and host communities as training participants. After training, they are eligible to apply for unsecured loan with a value of up to 8 million Rwandan Francs.

The recruitment of aspiring entrepreneurs is done by a team of three people: two business development advisors and one volunteer all based in refugee camps. When it comes to urban refugees, Inkomoko asserts that they have disbursed up to 15 million Rwanda Francs of individual secured loans (i.e. requiring collateral). All loans are disbursed to qualifying individuals via their bank account in Equity Bank. After working with refugees for the last 3 years (since 2016), Inkomoko has disbursed up to 300,000USD to; 1) Camp-based refugees who have benefited from Inkomoko financial training and loans, 4,600 to date, 2) Urban refugees who have benefited from Inkomoko financial training and loans, 1,000 to date, 3) Host community members who have benefited from Inkomoko financial trainings (mass, one-on-one) and loan are: 333 (for the year 2019). FGD participants did point out that Inkomoko targets established businesses. This may be a perception issue, but it could influence the uptake of services offered. ■

The results of the test showed statistically significant differences (p-value of 0.000) between refugees and host community members on the basic financial addition question of which 88% of camp household residents and 76% of host community households got the answer right. Both refugee and host communities were much less successful at the second and third questions; only 30% and 9% of refugee households answered these questions correctly. In the host community, the awareness of how interest rates are calculated was slightly higher (by about 3%) but the differences are statistically insignificant (p-value 0.565)

FIGURE 11 Percentage of respondents who gave correct answers to basic financial quiz

Source: KUHI Consortium Digital assessment (2019)



These findings indicate that financial literacy is still low within both refugee camps and host communities. It was brought to researchers' attention that there is a plan to roll out mass financial education trainings in 2020.

### 3.8 Usage of water

The household survey collected information on the main source of water and electricity in both refugee and host community based households. The main source of interest was piped water from Water and Sanitation corporation (WASAC) for water service, Rwanda energy Group (REG) and a host of off-grid solar energy providers. The study was particularly interested in how residents in both communities pay their bills.

Water is freely provided in the camp but households are responsible for paying energy utility bills. A number of off-grid suppliers are active in the camp with different products. Overall, 42% of households in six refugee camps and 55% in the neighbouring host communities have electricity in their homes with Gihembe having the highest percentage of households with electricity (75%). ►

TABLE 11: Percentage of households connected to electricity

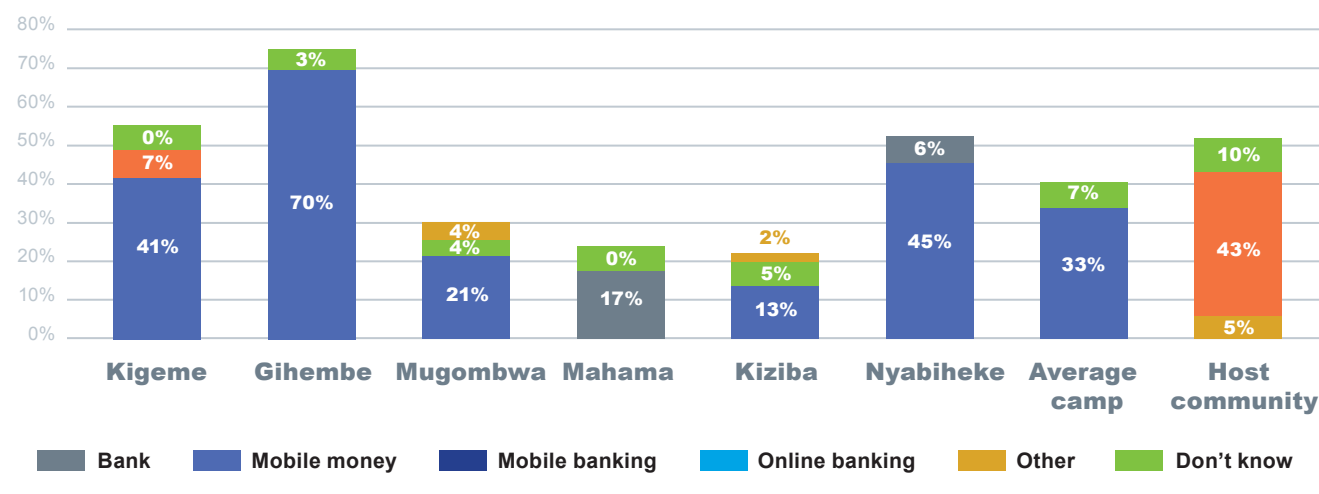
Source: KUHI Consortium Digital assessment (2019)

Location	Base sample	Electricity
Kigeme	201	49%
Gihembe	187	75%
Mugombwa	189	26%
Mahama	198	17%
Kiziba	201	33%
Nyabiheke	203	55%
Average camp		42%
Host community	600	55%

Among refugee households with electricity connection to their homes, 74% use mobile money to pay electricity bills compared to 78% of households in the host community.

TABLE 12: Utility payment methods among refugees and host communities

Source: KUHI Consortium Digital assessment (2019)



Overall, 32% of all households across the six refugee camps use mobile money to pay energy bills compared to 43% in host communities. Gihembe has the highest percentage (70%) of households using mobile money to pay energy bills. Information obtained through FGDs indicate that there are various service vendors that accept mobile money payments. These include BBOXX which solely accepts mobile money payment for solar energy bills and Inyenyeri, a Rwandan social enterprise that offers environmentally friendly energy cooking stoves and fuel pellets as an alternative to firewood.

It was reported that if a service is given on credit, refugees deposit their electronic card with some vendors, to prevent the credit recipient from defaulting. ►

### **Box 3: Case study – BBOXX**

BBOXX Rwanda joined forces with Practical Action and Energy for impact to implement the Renew Energy for Refugees Program (RE4R) in Rwanda. The RE4R is an initiative of UNHCR with the support of the IKEA Foundation that seeks to help refugees and their host communities' access clean renewable energy for lighting, cooking, etc. hence move from reliance on aid to economic independence. So far BBOXX Rwanda has, through the RE4R initiative, served 1,500 customers across 3 refugee camps as follows: 487 in Gihembe, 603 in Kigeme and 410 in Nyabiheke.

To serve both refugees and host communities, BBOXX shops are located around the camps (within host communities) but sales agents are recruited from refugee communities. In doing so, both refugees and host communities have easy access to shops. On top of these numbers, thousands of members from host communities also benefit from BBOXX clean and renewable energy services. All BBOXX customers pay their bills via MTN mobile money or Airtel money only. BBOXX customers are assigned customer IDs linked to their account numbers so that they make payments from any phone and any mobile money account. In doing so, BBOXX can serve those who are not in possession of mobile phones. This partnership started in May 2018 and is due to end September 2020. ■

### **3.9 Livelihoods of refugees and host communities**

There are limited livelihood opportunities in and around refugee camps to enable refugees to supplement or replace aid assistance provided by UN & humanitarian agencies. Discussions held with FGD participants revealed a consistent pattern and division of labor at the household and camp level. Women for example dominate petty retail trade in food stuffs such as cooking oil, vegetables. They also partake in weaving of baskets, pedicure, manicure, and hairdressing, among others. Many of these activities require limited capital input, which the women can raise in saving groups. These activities do not require going outside the home/camp environment, which is necessary as the majority of domestic work also fall to women. They use proceeds typically to buy household essentials.

Men are more likely to engage in relatively capital-intensive activities such as retailing soft drinks and beer. They also engage in some temporary work outside camps, which women are less likely to do due to the burden of domestic tasks. Youth tend to be involved in selling airtime and running mobile money kiosks. Traditional gender roles are entrenched; if women are less likely to move outside the camp due to a high burden of domestic tasks falling on them, careful program design will be required to improve their incoming generating potential and access to financial services. ►



Lack of capital is a cross cutting issue; there are financial service providers in the camp, but the perception was reported that they are not for 'ordinary' people with small capital requirements. Most trade is on a subsistence level and informal saving groups are seen as more attuned to the financial needs of businesses of this scale. Members of these groups are willing to borrow at high interest rate of 5% per month compared to 1.4%-1.9% charged by formal microfinance providers.

In the host community, the livelihood activities of men, women and the youths are not any different from refugee camps. However, there is exposure to other digital services that are not available in refugee camps. For example, Irempo digital payment platform used by host community members to pay for various government services is not available in the refugee camps. The platform has a network of agents across the country. Most agents tend to be youths, once again highlighting how digitization of the economy is skewed towards the young. During this research, the team found it challenging to find female agents to interview. The situation is the same in the host community where digital services are more likely to be provided by young men than women. ►

#### **Box 4: Case Study – Working in the digital economy**

In his early twenties Bizimana Damascene (name changed for privacy) has found a way to make a living in Gihembe camp, in the digital economy. Bizimana noticed that many of his friends and family from DRC receive remittances from their relatives overseas. He set out to become an agent for various money transfer services used by camp residents. He is also agent for one of the major banks in Rwanda. When money is wired to the accounts of refugees, they come to him to either cash in or to buy food stuffs. He says the digital economy is a win-win situation for both youths like him and the cash recipients who do not need to travel long distance to get services. Kavaruganda Jonathan (name changed for privacy) is a technician working for a Rwandan company that sells environmentally friendly fuel pellets. His role is to sell fuel pellets to customers who sign a contract committing to monthly payments, where payment is made via mobile money accounts.

Many of the opportunities emerging in the digital economy appear to be taken up by youth over other age demographics, such as the elderly who are less comfortable with mobile technology. While on the whole earnings benefit the entire household, it will be necessary to assess and monitor how increased digitization of humanitarian assistance and the economy is affecting women, men, girls and boys. ■

### 3.9 Existing digital services

In the host community the digitization of services is already taking shape with the introduction of the Irembo digital payment platform and Smart Nkunganire system (SNS). SNS is a supply chain management digital system developed by BK TechHouse (an affiliate of Bank of Kigali) and Rwanda Agricultural Board (RAB) to facilitate the supply of fertilizers to farmers. Bank of Kigali has since introduced Ikofi which is a digital wallet that allows farmers, agro-dealers and other actors in the agriculture value chain to save money and pay for a host of services. Subscribers to the two applications can receive advisory services, order inputs and obtain credit. The financial records kept in the system allows the bank to make loan decisions based on a credit score of the client. This is not present in the refugee camps, but certain aspects may appeal to refugees as well, if adapted or marketed towards them.

### 3.10 Perceptions of digital safety

Mobile money accounts are generally perceived to be secure among both refugee and host communities. The fact that each account holder has their own password to which no one else has is reported as the main reason for this perception. There are also extra benefits that come with using digital technology that influences people's perception of digital security. Feedback obtained from FGD participants shows that time and money savings associated with mobile money accounts attract many to the service. Compared with financial service providers based outside the camp, where extra costs are incurred to travel to deposit funds, mobile wallets are also associated with cost savings.

*“My sim card is my secured wallet, no one can steal my money once it is saved there”*

*Male disabled person,  
Mugombwa refugee camp.*

Mobile money accounts are particularly suited to individuals saving small amounts of money. The presence of MNO agents in close proximity allows savers with as little as one thousand Rwandan francs (US\$ 0.93) to deposit it onto their mobile money

accounts, something that they would seldom do at a bank. The fact that money can still be claimed back in the event of losing the phone under sim-swap arrangement<sup>7</sup> inspires further trust in mobile wallet security. However, whereas trust is generally high, some concerns are reported. Network outage in some locations was highlighted as was a perceived high transaction charge for small amounts and a lack of relevant information on cybercrimes/theft. ►

*“I can't take one or two thousand to the bank but I can save it on my mobile money account and use it wisely”*

*Female adult,  
Kigeme refugee camp*

Among groups such as senior citizens and those with low literacy levels, reliance on third parties (such as mobile money agents) to keep their passwords, and make withdrawals and payments for them is a potential threat to the safety of their money. Most households did not consider this a risk, citing the trust that they have in the agents whom they say are “their own”. Mobile money users do not always have information on service fees and trust what agents tell them. In the past this has been used by unscrupulous agents to charge more than what is permitted. When Mvisa<sup>8</sup> or mobile money password is lost or forgotten, the process of obtaining a new one is not clear to some people. There are also wide reports of agents or vendors retaining Mvisa cards to allow the owner of the card to access goods on credit, an issue which could be open to abuse by unscrupulous vendors. The reported high confidence in digital safety could reflect close community ties and high levels of trust, rather than a widespread awareness of what constitutes a secure digital environment.

*“One day a person called me and told me that I won one hundred thousand Rwandan francs and asked me to send ten thousand to his number and be able to get access to that money”*

*Female adult,  
Kigeme refugee camp*

### **3.11 Digital financial inclusion (digital) landscape**

Numerous organizations and agencies have expressed interest in supporting efforts to promote financial (digital) inclusion in refugees and host communities. The actors can be grouped into four categories. Regulators, funding agencies, implementing agencies, digital financial services provider (DFS).

#### **3.11.1 Regulators - National Bank of Rwanda**

The National Bank of Rwanda (BNR) is the main actor in the regulatory space. It is the Government entity mandated to oversee the implementation of sound and inclusive financial systems. BNR oversees financial inclusion at macro level. The National Financial Inclusion strategy (NFIS 2019) aims include supporting stakeholders to identify and implement actions that improve financial inclusion. More importantly, the strategy seeks to support efforts geared towards the development of financial products tailored to the needs of vulnerable population including refugees. Collaboration opportunities could include the digitization of village saving group under “know your customer” standard that the Central Bank requires all Financial service providers to adhere to. ►

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<sup>7</sup> An arrangement where the MNO replaces the mobile number with all the money saved on it digitally.

<sup>8</sup> An Equity branded electronic card used by refugees to cash in their cash assistance wired to their accounts by UN agencies.

### **3.11.2. Funding agencies**

United Nations agencies (WFP and UNHCR) are at the forefront of implementing cash-based transfers along with their partners. UNHCR provides monthly cash-based transfers to refugees (for non-food items) but also partners with other actors such as Inkomoko to drive financial inclusion. They have also funded the Renew Energy for Refugees Program (RE4R) in partnership with the IKEA foundation. WFP provides cash assistance to refugees to cover food items. The United Nations Capital Development Fund is implementing a Comic relief funded Rwanda through partners, expanding financial access & digital financial literacy for refugees (REFAD) in refugee camps and host communities.

### **3.11.3. Other key players**

Access to Finance Rwanda has been supporting financial inclusion initiatives in Rwanda for the past decade. Recently, they have worked with the National Bank of Rwanda to develop NFIS which includes refugees as a target group. In 2018, FSD Africa and Access to Finance Rwanda with technical support from Frankfurt School of Management rolled out a pilot initiative (through the Umutanguha Finance Company) to support refugees in Rwanda aimed at providing financial services that would result in 18,000 refugees graduating from cash assistance to self-reliance.

### **3.11.4 Digital Financial service providers**

Digital financial service providers include the two MNOs and Equity bank which handles all electronic payments to refugees. MTN and Airtel are present in all camps, and there is an opportunity for them to build refugee-oriented products.

### **3.11.5 Reflection on the digital financial inclusion landscape**

Stakeholders could benefit from actively engaging in coordination to ensure initiatives are complementary and achieve optimum coverage. A significant number of pilots have been initiated but progressing to scale is a challenge encountered by numerous agencies and it is rare for a product to be taken up and expanded to all six camps and host communities. Where possible, metrics to measure and assess the capacity of an intervention to be taken to scale should be in place, even at pilot stage.

Host communities and refugees are often grouped together but efforts to develop distinctive KYC (Know-Your-Customer) that can inform services/products design would likely result in better uptake of services in different populations. The research teams noted this while speaking to MNOs, FSPs and some services/products providers. Building interest among providers in investing in expanding services to refugees should be addressed, as there was some perception of refugees as a volatile and dependent market segment with low purchasing power. However, as the findings have shown, there is a potential market within the refugee population. ►

#### **4.0 Emerging opportunities, issues and recommendations for consideration**

The digital financial inclusion landscape has significant potential, with increasing numbers of available products coming on to the market. There is an opportunity for a coordinated approach by NGO partners to support and facilitate knowledge, demand and uptake of beneficial services for refugee and host populations as part of efforts to support increased financial inclusion for these populations.

#### **4.1 Raising the critical mass of digital financial inclusion aware people in the camps and host communities**

The findings have shown that awareness and uptake of digital financial services is relatively low in both refugee and host communities, beyond the P2P mobile money transfer function. Even though mobile money services are gaining in popularity, they are not currently being utilized to their full potential. There are multiple service vendors in both communities, who promote specific products and target specific segments of the population. There is an opportunity for digital financial inclusion partners to play a facilitative role, linking digital service vendors with end users who are the households in the refugee camps and host communities. At the moment the interface between service vendors such as the MNOs and households are through agents who either have limited incentive to disclose all information to households or are not yet trained to do this, particularly in an inclusive way. The issues highlighted around mobile money account users not knowing the transaction fees could be addressed through this mechanism. It is recommended that widespread financial literacy training is rolled out, around savings and the cost of interest rates, which is currently poorly understood.

#### **4.2 Promoting livelihood diversification and skilling**

A case has been made in several studies including research by UNHCR and GSMA (The Digital Lives of Refugees, 2019) that affordability is a contributing factor to uptake of digital financial services; some individuals do not have phones or cannot send money via their mobile wallets. It is a barrier to saving money and for paying for utilities such as electricity in their homes. For some, limited financial capacity may also be a disincentive to exploring products offered by financial service providers.

A combination of digital financial awareness, productive skills, and practice could contribute to an increase in uptake of digital financial services, increasing digital financial inclusion and self-reliance. This will require advocacy on the right to work and free movement of people in and outside the camp for people to make use of their skills. The Government of Rwanda has opened the labor market to refugees, but in practice refugees perceive that it is still closed to them. Engaging with potential employers to ensure they are aware of refugees right to work, and clarifying the process of getting permission to exit the camp may also lead to refugees accessing livelihoods opportunities in the host communities. ►

### **4.3 Digitizing village saving groups to enhance credit worthiness and meet “Know your customer” requirement**

Research has shown that most refugees and host community savers prefer informal village saving to formal financial institutions. For individuals with small amounts to save, informal saving groups are convenient and trusted, despite higher interest rates charged compared to some formal financial institutions. As financial needs of individuals evolve and exceed the capacity of the village saving group to service, they may need to access larger amounts from formal financial institutions or other lenders willing to offer micro-loans. Yet under the ‘know your customer’ requirement, financial institutions are required to have credit profile of borrowers. There is an opportunity for not for profits to explore how the transactions that happen in informal saving groups can be digitized and used by financial institutions to lend members sums that an informal savings group cannot raise. Financial institutions would have credit profile of group members and would be in a position to make loan decision much faster.

### **4.4 Encouraging and leveraging digital services such as Mochash to offer microloans to mobile wallet subscribers**

This research found that both mobile networks have wide coverage, and a majority of network subscribers also have mobile money accounts. Yet currently available savings and loans products are not currently being used by the populations surveyed. There is room for NGOs to leverage existing products to deepen digital saving and micro-loan uptake. For this to happen engagement and new partnership models with MNOs will be required.

### **4.5 Creating space for greater coordination among actors**

The call to deepen financial inclusion of refugees and host communities has certainly attracted interest when considering means by which economic inclusion can be increased. From donors, humanitarian NGOs, service vendors and financial service providers, numerous organizations are trying to pilot and implement initiatives. As has been documented the outcomes of pilots are not systematically shared with the financial inclusion community of practice for learning purposes. With many actors piloting ideas or products, there is risk of duplication and lack of synergy. There is an opportunity for a facilitation role, responsible for coordinating learning and sharing among actors. ■

## 5.0 Conclusions

This research has demonstrated that key conditions for improving digital financial inclusion exist in both refugee camps and host communities. Access to mobile phones is high in both communities, as is the number of households registered on mobile money accounts offered by the two main MNOs. New ideas and products are coming into the market courtesy of Inkomoko and Umutanguha with support from donors and partners such as FSD Africa and UNCDF, among others. However, these are still perceived to be targeting certain market segments, such as aspiring entrepreneurs, and not the general population. To deepen financial inclusion beyond those already in business, there is a need to scale up knowledge and skills on financial literacy to the wider population. If this was combined with diversifying the livelihoods of refugees boosting their savings capacity and ability to pay for utility services digitally. The savings culture taking root within informal saving groups can be leveraged to spur uptake of microloan products. Digitizing saving groups can also pave the way for qualifying members to benefit from micro-loans offered by financial service providers. Under the current “know your customer” requirement, financial institutions are required to have a credit profile of borrowers before disbursing loans to them. This requires close collaboration between implementing agencies on the ground, financial service providers and regulators. Close coordination among all actors involved in financial inclusion is also vital to avoid duplication and wastage of resources.

Research Hub was commissioned to assess digital financial inclusion in refugee camps and host communities in Rwanda by the KUHl consortium, comprising World Vision, ALIGHT (formerly the American Refugee Committee), GiveDirectly and UNCDF, with support from GSMA. The study specifically intended to achieve two objectives; 1) Map the (digital) financial inclusion landscape in the refugee camps and host communities, 2) Determine the readiness of these populations to adopt digital (financial) services and the key conditions that need to be in place and partnerships that are needed to drive the successful adoption of these services. ►

**The study intended to answer the following research questions:**

1. What financial inclusion models targeting refugees exist in the Rwandan context if any?
2. What is the extent of mobile phone penetration among refugee and host communities in Rwanda?
3. What are the financial literacy levels among refugee and host communities?
4. To what extent are digital and financial services available and used in refugee and host communities?
5. What level of access to financial services (formal and informal) do refugees and host communities have?
6. What livelihood and income generating activities are available to refugees and host communities?
7. What is the level of access to clean to clean energy (solar water and fuel) and digital payment platforms?
8. To what extent are there consumer protection (digital safety) mechanisms governing the use of digital tools in refugee and host communities?
9. How inclusive to women, youths, person with disabilities are available digital financial services in refugee camps and host communities?
10. Who are the key players in terms of digital and financial inclusion in in Rwanda with regard to refugee and host communities?
11. To what extent is there potential for mobile network operators to expand their operations/coverage in refugee and host communities?
12. To what extent do refugees and host communities satisfy the ID requirement for 'know your customer' (KYC) purposes where required?



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## List of acronyms:

ARC: American Refugee Committee (now ALIGHT)
CRRF: Comprehensive Refugee Response Framework
FDPs: Forcefully Displaced persons
FGDs: Focus Group Discussions
FSD: Financial Sector Deepening
FSP: Financial service provider
ID: Identification Document
KIIs: Key informant interviews
MNO: Mobile Network Operator
MTN: Mobile Telecommunication Network
NGO: Non-Governmental Organization
UFC: Umutanguha Finance Company
UN: United Nations
UNCDF: United Nations Capital Development Fund
UNHCR: United Nations High commission for Refugees
WFP: World Food Program

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