GSMA

An initiative of

CONNECTIVITY FOR REFUGEES

Connectivity for Refugees:
Rwanda Country Profile

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GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

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About the Connectivity for Refugees initiative

To enduringly address the connectivity challenge, and in line with the UN Sustainable Development Goals principle of leaving no one behind, UNHCR, the Luxembourg Government, International Telecommunication Union (ITU) and the GSMA have come together to initiate a blueprint for action, bringing together a wide range of private sector, government, international organisations and forcibly displaced communities, to enhance connectivity in refugee-hosting areas and open pathways for greater access to information, education, livelihoods and enhanced humanitarian protection. More information is available at www.refugeeconnectivity.org

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Introduction

Rwanda has a complex history marked by periods of conflict and humanitarian crises. In the aftermath of the 1994 genocide, Rwanda faced the immense challenge of rebuilding and reconciling a fractured society. The displaced populations, both within and outside the country, added to the complexity of the humanitarian situation. Internally displaced persons (IDPs) sought refuge in camps, and the return of refugees from neighbouring countries further strained resources and infrastructure.

Over the years, Rwanda has made significant progress in post-conflict recovery, economic development, and social reconstruction. However, challenges persist, including issues related to poverty, access to education and healthcare, and the reintegration of returning refugees. The country has also been affected by natural hazards, such as flooding and landslides. Despite the challenges, Rwanda has been recognised for its commitment to inclusive policies, economic development, and efforts to address the root causes of conflict.

Over the past decade, Rwanda's information and communication technology (ICT) sector has become one of the fastest growing in Africa. While the Human Development Index (HDI) stands at 0.534, placing Rwanda 165th out of 191 countries, ambitious goals have been outlined in the National Strategies for Transformation, including attaining middle-income status by 2035 and becoming a high-income country by 2050. Agriculture is central to Rwanda's economy, with 62.3% of the population employed in this sector (71% female and 53% male). The government envisions a transformation in agriculture by 2050,[1] with subsistence farming transitioning to a model of fully monetised, technology-intensive commercial agriculture and agro-processing.[2]

When it comes to regulation, as a country that has put ICTs at the centre of its development since 2000, Rwanda has duly earned its entry into the still small but growing number of African countries to be rated as having attained the fourth generation of regulation (G4) level. G4 is characterised by integrated regulation, led by economic and social policy goals. G5, which is well within Rwanda's grasp, has the important additional aspect of deep and meaningful collaboration as a means of achieving development-oriented digitalisation and digital transformation.[3]

Displacement context

Over the past three decades, Rwanda has been coping with an influx of displaced people, primarily as a result of protracted refugee situations in the Great Lakes region. As of August 2023, Rwanda was hosting a total of 134,519 refugees and asylum seekers, mainly from the Democratic Republic of the Congo (DRC) (61.4%) and Burundi (38%).

Most of these refugees, around 91%, reside in six refugee camps (see Figure 1): Mahama, Nyabiheke, Gihembe, Kiziba, Mugombwa and Karongi. In addition to these camps, there are also four refugee transit centres in Rwanda: Nkamira, Nyanza, Bugesera and Gatore.[4]

Furthermore, Rwanda is highly vulnerable to natural hazards, particularly flooding and landslides following heavy rainfall. These disasters have compounded the humanitarian challenges in the region. In 2020, hundreds of refugees were transferred from Kigeme Refugee Camp to the Mahama camp due to environmental degradation. Similarly, Gihembe Refugee Camp was closed in 2021 due to the threat of erosion and landslides, with residents also relocated to Mahama Refugee Camp.[5]

1. UNDP Human Development Index 2021
2. https://migrants-refugees.va/country-profile/rwanda/#:-:text=Rwanda%20has%20six%20refugee%20camps,Nyanza%2C%20Bugesera%2C%20and%20Gatore.
3. Switching on Smart Rwanda: Digital inclusion, collaboration and a G5 mindset, ITU (2021)
4. https://reporting.unhcr.org/rwanda-operational-update-5693
5. https://www.refugeesinternational.org/reports-briefs/turning-policy-into-reality-refugees-access-to-work-in-rwanda/

Figure 1
Populations of Concern to UNHCR

Source: UNHCR, 2023

Connectivity context

Rwanda has made major strides with connectivity, especially in recent years. The government has been proactive in expanding connectivity by developing robust digital infrastructure and initiatives like Kigali Innovation City, which aim to position Rwanda as a tech hub in East Africa. Rwanda's Vision 2020 initiative sought to transform Rwanda into a knowledge-based economy, focusing on ICT and connectivity as essential to growth. Accordingly, Rwanda has nurtured a growing start-up ecosystem, with incubators and innovation centres attracting tech entrepreneurs.

Rwanda has strong network coverage in most of the country – ITU data notes almost 99% of the population is covered by a 4G network.[6] There are two major MNOs: Airtel Rwanda (which acquired Tigo) and MTN Rwanda, with MTN holding the larger market share. MTN Rwanda has the widest network coverage in the country and reports that their network is widely available in remote areas and refugee camps, according to GSMA research.[7] Mobile phone penetration is high, with a growing number of Rwandans accessing the internet through smartphones.[8,9] However there are likely to be gaps in service in refugee hosting areas.

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6. ITU World Telecommunication/ICT Database data for 2022
7. The Digital Lives of Refugees https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/The-Digital-Lives-of-Refugees.pdf
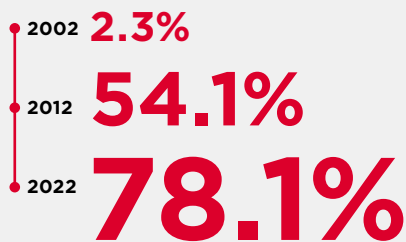8. Rwanda National Census 2022
9. GSMA Intelligence

How mobile phones are used

Mobile money is widely used in Rwanda, with 31% of the population reporting using a mobile money account according to GSMA research from 2019. There are four live mobile money services in the country: MTN Mobile Money, Airtel Tigo, Dau Pesa and MCash. Through a partnership with KCB Bank, MTN mobile money users can access loans and savings products, and other partnerships have provided access to e-health and e-learning platforms. MNOs have made progress in implementing cross-network services such as mobile money interoperability. The Rwandan government and regulatory authorities have been supportive of such initiatives to expand financial inclusion.
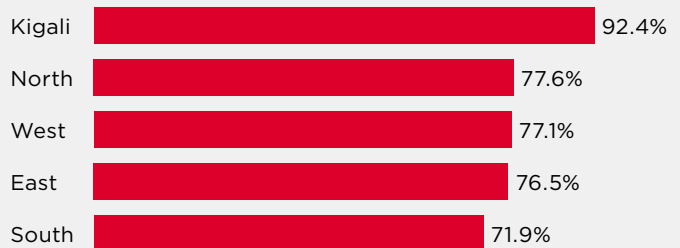
Many refugees have access to mobile phones, which are commonly used for communication, accessing information and mobile banking services. GSMA research in 2019 found that in Kiziba, two-thirds of refugees were active phone users, with 62% owning a mobile phone and 19% borrowing one. Mobile money use is also high among refugees, 59% in Kiziba camp in 2019, which is likely to have increased since then. Non-governmental organisations (NGOs) and UNHCR, the UN Refugee Agency, often provide support for connectivity projects in refugee camps (Mahama and Kiziba), including setting up community centres with internet access, mobile charging stations, digital literacy programmes and solar power solutions for charging stations and internet access centres.

Possession of mobile phones

National Level

2002 **2.3%**

2012 **54.1%**

2022 **78.1%**

By Province

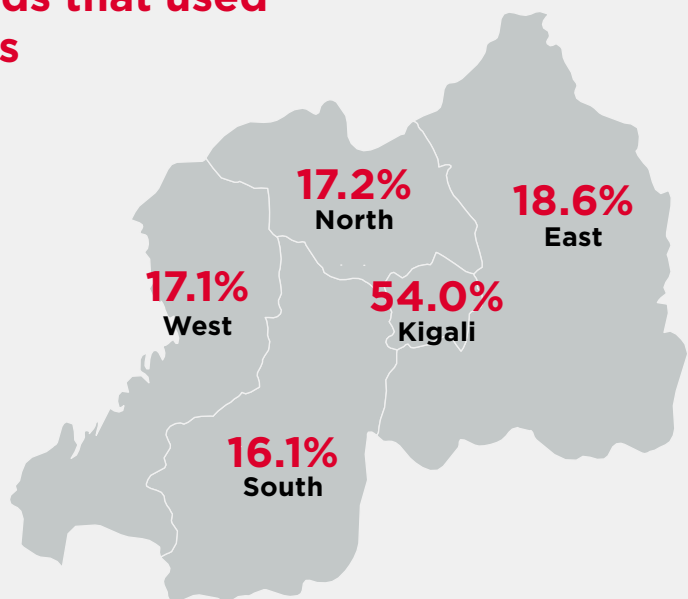| Province	%
Kigali	92.4%
North	77.6%
West	77.1%
East	76.5%
South	71.9%

Distribution (%) of households that used internet in the last 12 months

22.8%
Private households have used internet

17.2% North

18.6% East

17.1% West

54.0% Kigali

16.1% South

Legal and regulatory environment

Refugee policy environment

According to Refugees International, Rwanda has an enabling policy environment for refugees. Refugees can access formal employment without a work permit, be integrated in national health and education systems, have freedom of movement, and they can register businesses and open bank accounts with a refugee identity card.[10] GSMA research in 2019 showed refugee identity cards being issued and verified by the Government of Rwanda. The goal of the refugee ID cards is to facilitate access to public and private services, employment and increase freedom of movement of refugees inside Rwanda.

However, the prospect of formal employment is not a reality for many refugees in Rwanda. Most refugees continue to reside in camps, where job prospects are scarce and primarily consist of incentive-based or volunteer work. Refugees living in urban areas typically do not qualify for financial assistance or housing support. This leaves them with a difficult dilemma: relying on humanitarian aid inside the camps or seeking work outside and risking being unable to make a living.

In addition to these challenges, refugees in Rwanda have expressed they face other barriers. These include inadequate infrastructure within the camps, lack of electricity, experiences of discrimination, and difficulties accessing capital to expand their businesses. Additional barriers are limited awareness among some private sector entities of refugees' right to work and a shortage of data on refugee skills, which could help to match them with employment opportunities in the country.

Telecoms policy environment

The Rwandan government has been actively promoting the growth of the ICT and telecommunications sector to achieve its development goals. As a result, the legal and regulatory environment has evolved to encourage investment and innovation in this sector. The Rwanda Utilities Regulatory Authority (RURA) is the primary regulatory body responsible for overseeing the telecommunications sector in Rwanda and ensuring compliance with the country's telecommunications laws and regulations. The Telecommunications Law of Rwanda provides the legal framework for the sector. It covers various aspects, including licensing, quality of service, competition, and consumer protection. Rwanda also has a Universal Access Fund that aims to promote the extension of telecommunications

services to underserved and remote areas. The legal and regulatory environment also encompasses data protection and privacy laws, and encourages MNOs to share network infrastructure to optimise resources and extend coverage to underserved areas. Rwanda has become one of a small but growing number of African countries to be rated as having attained the fourth generation of regulation (G4) level. G4 is characterised by integrated regulation, led by economic and social policy goals. G5, which is well within Rwanda's grasp, has the important additional aspect of deep and meaningful collaboration as a means of achieving development-oriented digitalisation and digital transformation.[11]

SIM registration

According to UNHCR research, SIM registration is required by law in Rwanda as specified in the Regulations on SIM Card Registration and is supervised by the Rwanda Utilities and Regulatory Authority (RURA).[12] For non-Rwandans, including refugees, the regulation requires an "original travel document". Notably, the English version of the MTN SIM registration form for foreigners includes "Refugee (without ID card)" as a customer type, as well as an option for a UNHCR ID number (as a travel document).

For refugees who want to access a SIM card, the situation differs between urban and camp settings. In urban settings, refugees can buy a SIM card at the MTN centres using their UNHCR proof of registration. Agents in urban areas however can only register documents issued by the Rwandan authorities, e.g. Rwandan IDs and refugee ID cards. For this reason, some refugees are believed to resort to asking others to buy a SIM card under their name. No such challenges appear to be present in and around refugee camps. For example, in Mahama, MTN agents inside and around the camps sell SIMs to refugees who only hold proof of registration from UNHCR. For returnees who have yet to receive their national ID card, UNHCR conducts a bulk activation of Airtel SIM cards registered in the organisation's name. Once the returnee obtains the ID card, they are informed that they need to go and present it at an Airtel location to update the registration data. Given the rise of SIM-related fraud, including SIM identity fraud, and phishing, RURA has announced that they will introduce new SIM card registration regulations. The current regulation does not sufficiently restrict the maximum number of SIMs a person can register in his/her name — a perceived loophole.

10. https://www.refugeesinternational.org/reports-briefs/turning-policy-into-reality-refugees-access-to-work-in-rwanda/

11. Switching on Smart Rwanda: Digital inclusion, collaboration and a G5 mindset, ITU (2021)

12. UNHCR Displaced and Disconnected

Know Your Customer Rules

Rwanda participates in the Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG), which is an Associate Member of the Financial Action Task Force (FATF). Supervised by the National Bank of Rwanda (NBR), the key regulations driving know-your customer (KYC) requirements are the Guidelines to Banks on Anti-Money Laundering and Combating Financing Terrorism and Directive 001/ FIU/2015 of the Financial Investigation Unit (FIU). The Directive lists the identification requirements for opening a bank account, including a national ID card, passport or driving license for residents. Non-residents must provide a passport, laissez-passer or ID "where applicable"

All this makes it difficult for refugees who only have UNHCR proof of registration to open a bank account. Only Equity Bank and national microfinance institutions accept this document. While refugee ID cards are normally accepted by banks, there have been reported cases of refugees encountering barriers when attempting to use them to open accounts. UNHCR partnered with FSD Africa on the report "Refugees and their Money": the study demonstrated the business case for financial service providers to profitably serve refugees in the country and encouraged a number of providers to pilot financial products and services for refugees in camps.[13] The Government of Rwanda has been supporting the process by informing stakeholders that a refugee's proof of registration from UNHCR is a valid document to satisfy KYC requirements and open bank accounts.

Mobile money

According to the World Bank's Global Findex database, Rwanda's mobile money penetration (account ownership among those 15 years or older) is 31.11%.[14] The National Bank of Rwanda has enacted Regulation No. 08/2016 Governing the Electronic Money Issuers, which reiterates the core identification requirements for opening a bank account: "MNOs are required to respect KYC rules prior to opening accounts – in practice a national identification card is required to register for mobile money." As such, refugees continue to face barriers in accessing mobile money. While mobile money agents from different MNOs operate in all refugee camps, and cash assistance to returnees is still issued via mobile money transfers, UNHCR and the World Food Programme (WFP) have switched from mobile money to smart cards for cash assistance in refugee settings.

Communication and connectivity needs

Rwanda has made significant progress in expanding communication and connectivity infrastructure, but various needs and challenges persist. Affordability, literacy and digital skills and charging are the main barriers to mobile phone ownership and mobile internet use in the country.[15]

Rural connectivity

While urban areas in Rwanda have relatively good internet and mobile network connectivity, coverage in rural areas and refugee camps is unreliable and none of the camps are on the national electricity grid. Expanding reliable internet and mobile network access to remote and underserved regions is a priority. This can be done through investment in telecommunications infrastructure, including expanding the fibre-optic network and building additional data centres, to improve network reliability and resilience. This would also strengthen resilience to natural hazards by ensuring continued access to connectivity for those affected, as well business continuity.

Affordability

High handset and data costs can be a barrier to mobile access for many people. Ensuring that communication services, including internet access and mobile data, are affordable for a broad segment of the population remains a significant need.

13. https://www.fsdafrica.org/wp-content/uploads/2019/08/Compressed.pdf
14. https://www.worldbank.org/en/publication/globalfindex/Data
15. GSMA Digital Lives of Refugees research

Digital skills and literacy

Many underserved populations lack the knowledge and skills to make the most of digital communication tools. Investing in digital literacy and technology skills is essential and would also support return on investment (ROI) and the sustainability of connectivity initiatives.

Underserved groups

Ensuring that people with disabilities, women and other vulnerable groups have equitable access to communication and connectivity services is a priority for inclusion and social development.

Business connectivity

With limited formal opportunities for employment, supporting the connectivity needs of small businesses would support refugee livelihoods and financial inclusion, and be a crucial driver of economic growth.

Agricultural services

Many refugees are engaged in agriculture as a means of livelihood and self-sufficiency. Connectivity is hugely beneficial for farmers to access market information, weather forecasts and agricultural best practices.

Wider humanitarian investment

International humanitarian funding for the refugee response in Rwanda totalled USD 28.9 million in 2023.[16] The response is coordinated through the DRC Regional Refugee Response Plan 2023, which sought $65.5 million in 2023 in Rwanda.

Around 70% of this funding was channelled through UNHCR and WFP for refugee support and food aid. Specific breakdowns of connectivity services for refugees are not readily available.

Figure 3
Humanitarian funding for Rwanda 2023

Country snapshot
US$28.9m total funding reported to FTS

$27.2m	$1.7m

94% funded through plans   **6%** other funding

Coordinated plans
Democratic Republic of the Congo Regional Refugee Response Plan 2023

$27.2m Funded   **$65.5m** Required   **41.5%** Coverage

Source: OCHA Financial Tracking Service https://fts.unocha.org/countries/185/summary/2023

16. As of November 2023.

Opportunities for engagement

The Rwandan government has been supportive of initiatives to improve connectivity for refugees, creating an enabling environment for investors. Government backing and policies that encourage such investments can provide stability and security for investors. The demand for connectivity services among refugees is substantial, and the market is growing as more refugees settle in Rwanda. This presents a commercial opportunity for investors to provide services and gain customers.

Investment in infrastructure development and resilience would help make network coverage in rural areas and refugee camps more reliable. It would also support resilience to natural hazards, ensuring continued access to connectivity for affected populations, as well as business continuity and market sustainability. Since access to formal work is not yet a reality for most refugees in Rwanda, improved connectivity can facilitate access to online job opportunities, remote work and entrepreneurial ventures. Donor investments can also stimulate economic self-reliance and improve the economic well-being of refugees. As refugees increasingly use mobile phones for mobile banking services, improved connectivity could also enhance financial inclusion more broadly.

Donors can also fund digital literacy programmes that equip refugees with the skills they need to navigate the digital world, making them more competitive in the job market. As mentioned earlier, investing in digital literacy would also contribute to ROI and the sustainability of connectivity initiatives.

Conclusion

Rwanda's rapid growth in ICT and its ambitious national development goals have set the stage for significant advancements in connectivity. Rwanda has made commendable progress, with strong network coverage and a thriving mobile banking and mobile-based services ecosystem. These advancements provide a foundation to support the connectivity needs of refugees and self-reliance and integration in the digital economy. However, it is essential to consider the unique challenges and opportunities that displaced populations face in Rwanda, including affordability, digital literacy and charging infrastructure. Ensuring inclusive mobile access and supporting small businesses in and around refugee camps will be crucial to enhance the lives of refugees in Rwanda.

Investing in connectivity for refugees in Rwanda not only aligns with the growth of ICT, but is also a means to empower refugees, improve their living conditions and contribute to self-sufficiency and economic well-being. Furthermore, such investments have the potential to bridge the digital divide and stimulate economic growth.

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