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An initiative of

CONNECTIVITY FOR REFUGEES

Connectivity for Refugees:
Ethiopia 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.

We invite you to find out more at www.gsma.com

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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

Ethiopia faces a complex and multifaceted humanitarian situation. Major conflicts and violence, including in the Tigray Region, have led to large-scale displacement. In addition to a significant number of internally displaced people (IDPs), Ethiopia also hosts a large number of refugees from the neighbouring countries of South Sudan, Sudan, Eritrea and Somalia, with needs including shelter, health care and education.

Conflict-affected areas face severe humanitarian crises, from food insecurity and lack of access to essential services to protection concerns. Ethiopia is also prone to natural hazard disasters. There are frequent droughts, which can have devastating effects on agriculture, food security and livelihoods. Droughts can also lead to water shortages and malnutrition, particularly in rural areas. Periodic floods, especially during the rainy season, cause

damage to homes, crops and infrastructure, and result in further displacement. Ethiopia is also susceptible to landslides, locust infestations and has experienced several outbreaks of cholera and malaria.

Beyond immediate crises, Ethiopia also faces long-term development challenges, including issues related to infrastructure, health care, education and poverty reduction. According to the Ethiopia 2024 Humanitarian Response Plan (HRP), more than 21 million people are in need of urgent humanitarian assistance.[1]

Recent liberalisation of the telecommunications market in Ethiopia has opened the door to greater connectivity and growth of the sector. However, mobile penetration remains low, particularly in rural and disaster-prone areas where the majority of refugees reside.

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1   UNHCR. (2023). Ethiopia: UNHCR Operational Update, August 2023.

Displacement context

According to UNHCR, Ethiopia is Africa's third-largest refugee host, offering shelter to more than 942,000 refugees as of August 2023, primarily from South Sudan, Somalia and Eritrea. Women and children make up 81% of this population. Most live in refugee camps and settlements established across different regional states, while more than 76,000 live as urban refugees in the capital Addis Ababa. UNHCR maintains a robust field presence in Afar, Amhara, Benishangul-Gumuz, Gambella, Oromia, Somali and Tigray regions, as well as in the city of Dire Dawa.

Internal conflicts and violence have also resulted in millions of IDPs. The International Organization for Migration (IOM), in their latest Displacement Tracking Matrix (DTM), reported 4.4 million IDPs were in Ethiopia as of June 2023. Side by side with their emergency response and provision of protection and life-saving humanitarian needs for the more than 127,000 new arrivals from Somalia and Sudan, and millions of IDPs, UNHCR continues to promote the self-reliance of refugees and host communities and to search for solutions.[2]

Figure 1
Refugee populations in Ethiopia

2   Ibid.

Connectivity context

Thanks to continued investments into mobile infrastructure across the country, 94% of Ethiopia's population is now covered by mobile broadband (3G+). This means there is a coverage gap of 6%, which is lower than the regional average of 16% across Sub-Saharan Africa. Further extending and upgrading mobile broadband infrastructure remains a challenge particularly in rural and disaster-prone areas where investment costs are high and expected revenues are limited. For displaced populations who often reside in such areas, access to mobile services may therefore be limited.

The ongoing efforts to liberalise the telecoms sector in Ethiopia is further helping to advance connectivity. Despite the achievements in coverage, only around 16% of the population are using mobile internet, however. This means that even when infrastructure is in place, many people are not yet using it. We refer to this as the usage gap. The usage gap is 78%, meaning that 78% of the population reside in an area that is already covered by a mobile broadband network, but do not use mobile internet yet. This is above the regional average of 44% in Sub-Saharan Africa. Mobile internet adoption in urban areas in Ethiopia is significantly higher than in rural areas. The gender gap in rural areas is particularly high.

Nevertheless, mobile penetration has been increasing in recent years as mobile devices and services have become more available and affordable. The GSMA has predicted that between 2020 and 2025, Ethiopia is expected to record the second-fastest growth in SIM card subscriptions in Sub-Saharan Africa – 11% a year.

The two main mobile network operators (MNOs) are Ethio Telecom and Safaricom. Ethio Telecom, a government-owned MNO has 72 million subscribers, and a mobile money platform, telebirr.

Safaricom was issued the first private MNO licence in Ethiopia in August 2021. They have more than 9 million subscribers and a mobile money platform, M-PESA, which went live in August 2023. Safaricom's investment in fibreoptic infrastructure is helping to further improve backbone infrastructure and mobile broadband speed.

The mobile money ecosystem in Ethiopia follows a bank-led model whereby banks and microfinance institutions (MFIs) partner with a technology provider to offer the service. The banking sector has several mobile money deployments, including Abay Be Deje, CBE-Birr, Hello Cash, H-Birr and M-BIRR.

Mobile money provides the opportunity for mobile money-enabled cash and voucher assistance (CVA), and several government, development and humanitarian agencies have tested and deployed mobile money cash transfer programming in Ethiopia. However, mobile money adoption is not widespread. According to the World Bank's Global Findex database, Ethiopia's mobile money penetration (i.e. account ownership among those 15 years and older) is just 0.32%.[3] Financial services providers (FSPs) in Ethiopia also have limited capability and experience to facilitate CVA.[4]

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3   The World Bank. (2021). The Global Findex Database 2021.
4   GSMA. (2021). Humanitarian Cash and Voucher Assistance Programmes in Ethiopia: Context analysis and capability assessment of the mobile money ecosystem.

Legal and regulatory environment

Refugee policy environment

The main national legal instrument governing refugees in Ethiopia is the Refugee Proclamation of 2019, which outlines the rights and responsibilities of refugees and provides a legal foundation for their protection and assistance. Refugee children in Ethiopia have the right to access education, and there are initiatives to provide schooling for refugee children, both in camps and urban areas. Refugees have access to healthcare services, including primary health care and emergency medical treatment. Steps have been taken to facilitate the economic self-reliance of refugees in Ethiopia. In urban areas, refugees can seek employment and engage in livelihood activities. They also have greater freedom of movement, which allows them to live outside of camps and access more diverse opportunities. The government of Ethiopia has facilitated the voluntary repatriation of refugees when conditions are conducive in their countries of origin, and local integration and resettlement are supported for refugees who choose to stay in Ethiopia.

Telecoms policy environment

The Ethiopian government has been working to improve the country's connectivity landscape. In June 2018, plans were announced to liberalise the telecommunications sector, opening it up to competition. These initiatives have aimed to expand and enhance connectivity available to the population, and were also part of a broader economic reform agenda aimed at attracting foreign investment.

Historically, Ethio Telecom was the sole provider in Ethiopia's telecommunications sector. Providing both fixed-line and mobile services, they were responsible for managing telecommunications infrastructure and services across the country. As part of the effort to liberalise the sector, the Ethiopian Communications Authority (ECA) (the regulatory body now responsible for overseeing the telecommunications and postal services sector in Ethiopia) was established in 2019 to enforce competition and telecoms regulations. The government initiated the process of auctioning telecoms licences to private companies. This marked a significant shift from the government monopoly, with the first private licence granted to Safaricom in 2021.

According to Ethiopia's Refugee Proclamation, refugees have access to SIM cards and mobile money services, but must first obtain a registration certificate from the Administration for Refugee and Returnee Affairs (ARRA). This certificate serves as their identification document (ID) and only refugees and asylum seekers who have been issued an ARRA/UNHCR ID card can legally register a SIM card. In practice, informal workarounds are common and refugees find ways to access mobile connectivity.[5]

Opening a mobile money account in Ethiopia is a multi-step process. Prospective clients must first obtain a SIM. Once a SIM is purchased, they apply for an account with a bank or MFI that offers mobile money services. This process requires them to present a copy of a national ID and a photo. These processes make it difficult for refugees, who often lack the required documentation and may only have a casual interest in the service.[6] The launch of Safaricom's M-PESA mobile money service in August 2023 has expanded the range of mobile money providers (MMPs) available.

The national digital ID programme, which seeks to minimise exclusion and enable citizens of Ethiopia to access education, health and financial services, tax certificates, travel documents and other services, may also provide opportunities to ease access to financial and social services[7] for refugees and IDPs.

5   UNHCR "Displaced and Disconnected" research: https://www.unhcr.org/innovation/displaced-and-disconnected/
6   Ibid.
7   UNECA. (16 August 2022). "The FDRE Council of Ministers Approves Ethiopian Digital Identification Draft Proclamation".

Communication and connectivity needs

As mobile internet use increases, there is a need for improved mobile network coverage, quality and affordability. Mobile connectivity is not only important for communication, but also for mobile banking, agricultural services, education and more. Although the mobile industry in Ethiopia has been growing, many refugee communities, especially in rural areas, still lack access to mobile phones and other technology. This makes it difficult for them to use mobile technology effectively during emergency response and recovery efforts. The barriers to this are: Literacy and digital skills, affordability, relevance, safety and security and other access factors (e.g. access to sales/retail agents, electricity, formal ID, etc.)

Telecoms infrastructure

Investment in telecommunications infrastructure development and upgrades is essential to provide reliable coverage and services throughout the country, particularly in remote and rural areas. Regular power outages not only hinder business operations, but also slow the adoption of new technologies by reducing incentives to invest in more advanced technologies.[8]

Improved affordability

Affordability is a challenge due to low incomes among refugee communities. High spectrum costs, high taxes, other red-tape drive up costs, while many refugees relying on day wages cannot pay for a device upfront but lack access to financing. The cost of acquiring and using mobile technology is therefore a barrier for refugees and organisations supporting refugees in Ethiopia. This includes the cost of mobile phones and data plans, which would help to increase access to mobile services if they were more affordable.

Underserved communities

GSMA research in the region has shown that women, people with disabilities and other marginalised groups are less likely to own or have access to mobile phones.[9] Ensuring digital inclusion for marginalised and underserved communities is a priority. Strategies to drive digital inclusion should take into account structural disparities, such as income and education levels, and an understanding of the needs of the individuals not yet using mobile internet.

Digital literacy

Many communities and humanitarian organisations in Ethiopia lack the capacity and skills to use mobile technology effectively in emergency response and recovery efforts. This includes a lack of trained personnel and resources to develop and implement these solutions. Language and literacy barriers can also make it difficult for refugees to use mobile technology effectively, especially in areas where multiple languages are spoken. Investing in digital literacy and technology skills is essential to connect refugee communities and would also support return on investment (ROI) and the sustainability of connectivity initiatives.

Healthcare connectivity

Telemedicine and electronic health records can improve healthcare services in remote and underserved areas. Increased access to the internet would also create opportunities for refugees to access digital health and telemedicine services.

Agricultural services

Agriculture is a significant part of Ethiopia's economy and provides economic opportunities for refugees. Connectivity is needed for farmers to access market information, weather forecasts and agricultural best practices.

Disaster management

Effective communication and connectivity are vital for disaster management and response, particularly in a country prone to natural disasters, such as droughts and floods.

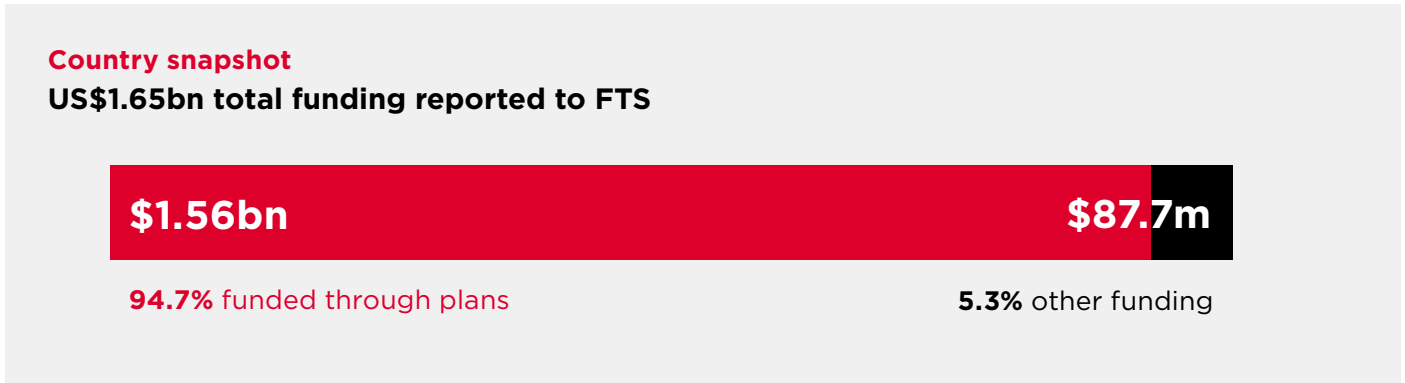8   Cirera, X. et al. (February 2023). Understanding Firm-level Adoption of Technology in Ethiopia. World Bank.
9   GSMA and UNHCR. (2022). The Digital Worlds of Displacement-Affected Communities.

Wider humanitarian investment

The UN has reported that humanitarian funding for Ethiopia for 2023 totalled $1.65 billion. However, disaggregating the proportion of funding for displaced people is challenging given the multiple displacements within the country and from neighbouring countries in the Horn of Africa, Sudan and South Sudan.

Combined, UNHCR and IOM received around 10% of the funding. Specific breakdowns for connectivity services for refugees are not readily available.

Figure 3
Humanitarian funding for Ethiopia in 2023

Country snapshot
US$1.65bn total funding reported to FTS

$1.56bn	$87.7m
94.7% funded through plans	**5.3%** other funding

Coordinated plan	Funded (US$m)	Required (USSm)	% coverage
Ethiopia Humanitarian Response Plan 2023	1,461.8	3,994.8	36.6%
Regional Migrant Response Plan for the Horn of Africa and Yemen 2023	22.5	32.6	69.2%
South Sudan Regional Refugee Response Plan 2023	51.0	318.0	16.0%
Sudan Emergency: Regional Refugee Response Plan 2023	26.8	92.1	29.1%

Source: OCHA Financial Tracking Service: https://fts.unocha.org/countries/71/summary/2023

Engagement opportunities

Although the digital divide in Ethiopia is significant, the connectivity landscape is changing and the government is working to create an enabling environment. Addressing barriers barriers to adoption could have a significant impact on those affected by crisis.

Investment in building and expanding telecommunications infrastructure in refugee camps and nearby areas, including mobile networks and wifi access, would improve connectivity for refugees. This would provide access to information and communication services in the event of crisis (outbreak of conflict or natural disasters) and foster economic opportunities for longer term livelihood support.

One entry point for investors is public-private partnerships (PPPs) and collaborations between humanitarian organisations and government agencies that focus on connectivity and digital inclusion for refugees. For example, supporting programmes that provide access to mobile and internet connectivity through affordability or shared access spaces.

Similarly, supporting initiatives that provide digital skills training to refugees would not only improve access to information and communication, but also equip them with valuable employment skills.

Other opportunities include investing in platforms that offer financial services to refugees, such as mobile banking and money transfer services to promote financial inclusion and self-sufficiency, or in renewable energy solutions to power connectivity infrastructure in remote refugee camps, reducing the environmental impact and ensuring sustainable access.

A recent context analysis and capability assessment of the mobile money ecosystem and service providers in Ethiopia found that the benefits of cash-based interventions increase significantly with the use of e-payment channels, which digitise aid delivery and make it more efficient and transparent.[10] Investment in such solutions, as well as partnerships and joint efforts between CVA implementers, could lead to efficient and large-scale cash-based responses.

Conclusion

For a person displaced from their home, a mobile phone can be a lifeline, allowing them to access humanitarian services, speak with loved ones or send and receive money. In Ethiopia, where more than 942,000 refugees are hosted, connectivity remains a critical challenge. Mobile penetration is low, particularly in rural and disaster-prone areas where most refugees reside.

However, with an enabling policy environment, initiatives to liberalise the telecoms sector and a growing market, investing in connectivity for refugees presents significant opportunities. Improving the connectivity landscape for refugees in Ethiopia is crucial for communication and access to information and services in disasters. It would also facilitate economic activities and provide better access to essential services such as health care and education.

PPPs and collaborations with humanitarian organisations are key avenues for investors to make an impact. Focused investments in connectivity solutions and addressing barriers to use are all crucial to addressing the connectivity gap for refugees. In urban areas, where refugees have opportunities to seek employment, enhanced connectivity and digital skills could increase employment and economic opportunities.

For investors and donors, engaging in connectivity aligns with the changing dynamics of Ethiopia›s telecoms sector. Ensuring connectivity for displaced populations is not only a strategic investment in Ethiopia's development goals, but also vital to enhancing the resilience and well-being of displaced communities.

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10   GSMA. (2021). Humanitarian Cash and Voucher Assistance Programmes in Ethiopia: Context analysis and capability assessment of the mobile money ecosystem.

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