

Mobile for Development

Reducing inequalities in our world

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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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GSMA Mobile for Development
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The views expressed in this brochure do not necessarily reflect the official policies of our funding partners.



Foreword



Over the last 12 years, Mobile for Development has remained true to its vision and stayed focused on driving innovation in digital technology to reduce inequalities in our world. With the support of our donors and partners, we have worked relentlessly to address the global priorities framed by the 17 UN Sustainable Development Goals (SDGs) and more recently to tackle both the short-term and systemic challenges raised by the COVID-19 pandemic.

Digital technology has played a critical role in addressing both. Mobile solutions have grown, evolved or emerged that allowed children to continue learning when schools were closing, took some weight off struggling healthcare systems, made economies more resilient despite restrictions and kept us connected when we were physically apart.

Mobile technology continues to enable financial and digital inclusion for those in low- and middle-income countries and is now also playing a key role in advancing these countries towards a low-carbon and climate resilient future by supporting the integration of this technology with climate mitigation, adaptation and resilience strategies.

To date, the work of Mobile for Development has impacted the lives of over 126 million people globally and is impacting the lives of people through almost all of the 17 of the UN SDGs.

As global progress is made to end the pandemic and build back better, our commitment to support the digital solutions that have the potential to make our societies, our economies and our planet more resilient and inclusive remains unscathed.



Max Cuvellier Head of Mobile for Development

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Global challenges, opportunities and **our impact**

More than

300 million

mobile money accounts are being used globally each month.

The gender gap in mobile ownership has remained relatively flat, with women in low- and middle-income countries

7%

less likely than men to own a mobile phone.

Meanwhile, the gender gap in mobile internet use continues to reduce, with women in low- and middle-income countries

15%

less likely to use it than men.

Mobile has already connected just over

3.8 billion

people to the internet.

While the reach of mobile networks has expanded in recent years, there is still a 'coverage gap' of

450 million

people who live in areas that are not covered by a mobile broadband network.

3.4 billion

people live in an area covered by a mobile broadband network but are not using mobile internet. The key barriers that must be addressed to drive digital inclusion and close this 'usage gap' are access, affordability, knowledge and skills, safety and security, and relevance.

90%

of global urban population growth from now until 2050 will be concentrated in Africa and Asia.

Much of this growth will be driven by the expansion of informal settlements posing unique challenges to city governments and utility service providers aiming to provide essential services to low-income populations.

1 billion

people around the world have no formal proof of identity. Without it, they cannot access basic rights and a number of life-enhancing services such as healthcare, voting, education, financial services, employment, and social protections.

235 million

people are expected to be in need of humanitarian assistance and protection in 2021 due to the global pandemic, an increase of

40%

from pre-pandemic levels.

1 in 3

people globally have access to safe drinking water.

Over **2 billion**

people globally lack access to at least basic sanitation services (JMP 2019).

500 million

households depend on agriculture for their livelihoods.

Smallholder farmers manage about

25%

of the world's cropland and produce around a third of the world's food.

The global community has less than one decade left to limit the global rise in temperature under

1.5 degrees.

Beyond that, the climate impacts will reach catastrophic levels causing irreversible damage to the planet. (UN, 2019)

Over

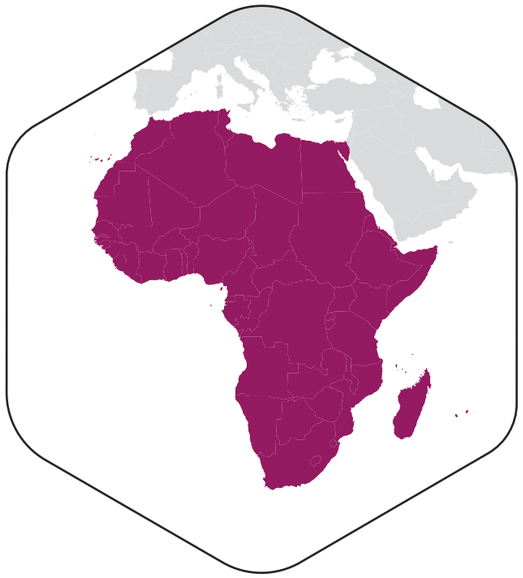
1 billion

people need at least one form of assistive technology, but only **10%** of them have access to the assistive technology they need to live independent and autonomous lives.

Africa



Africa:
Challenges, opportunities and our impact





> *Previously, if we were paid [cash] by the purchasing clerk, the money was spent lavishly but since they started paying us through the mobile money account, I am able to manage it very well. I go to withdraw the money only when I am in need of it. This helps me to have financial stability.*

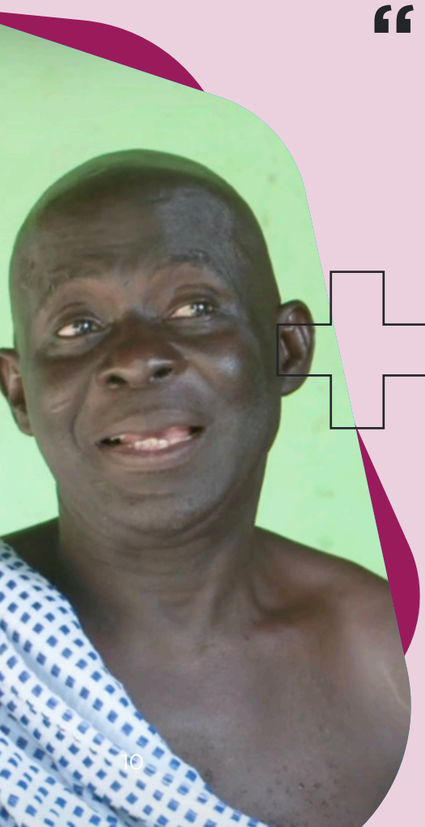
Grace Korkor - Farmer
Service: Mobile Money

Agriculture

1 in 2

people are engaged in agricultural production in Sub-Saharan Africa. Despite the importance of agriculture in rural communities, financial shocks are common and affect farmers' ability to plan and manage risks effectively.

Africa



> *The biggest improvement I have seen is that we do not need to go to Kade to get our business done anymore. We can now do everything on our mobile phones.*

Nana Kwateng Ababio -
Village Chief of Abodom

Connectivity

81%

of the population in Sub-Saharan Africa is covered by mobile broadband with a continued acceleration in coverage, as operators upgrade existing 2G sites to **3G** and **4G**, particularly with coverage gains in West Africa.

Assistive Technology

> *Mobile technology has helped me live an independent life. Simply because when somebody sends me money via M-Pesa, I can go to the nearest M-Pesa shop and do a transaction or withdraw. I withdraw on my own and I also transact by myself.*

John Mwangi - Student
Service: Mobile internet user



Persons with disabilities are

44%

less likely to own a mobile phone than a non-disabled person in Nigeria, yet in Kenya the mobile disability gap is only **7%**.

Africa

Ecosystem Building

> *Since the day I was sponsored to use Eneza, I regularly use it, it helps me to understand more what has been taught in class. Eneza has helped me improve on my performance and succeed in my examination.*

Kouame K. Benjamin - Student
Service: Eneza Education



Only

63%

of children in Côte d'Ivoire complete primary school, compared with **72.6%** in Africa overall. Those who do complete primary school have lower literacy and math skills than students in other Francophone African countries.



Internet has really helped me. We learnt the best times to plant certain crops. My farm was infested by army worms and they attacked our sorghum and maize. We took pictures and posted them on the internet and we were able to receive pesticides.

Florence Gakii Marango - Farmer
Service: Mobile internet

Gender Equality

Women in Sub-Saharan Africa are **13%** less likely than men to own a mobile and

37%

less likely than men to use mobile internet.

Financial Inclusion

Now it is very easy. While we are at home, we can get the [humanitarian cash payments], but before wherever we were, we were told to come get cash and sign a paper.

Hawa - Customer
Service: Voice ID project by CARE and Telesom Somalia/Somaliland

Humanitarian Response

There are over

half a billion

registered mobile money accounts in Africa. Sub-Saharan Africa accounted for **43%** of all new registered accounts in 2020.



Africa



If we have access to the internet, it really changes things because it connects us to the world. I'm a registered nurse. I consult my patients and do research on the internet. I can diagnose patients online and determine procedures.

Jacques Mupanga - Nurse
Service: Mobile internet

Digital Inclusion

In Sub-Saharan Africa, mobile internet adoption stands at

28%

The biggest barrier to mobile internet adoption reported by consumers who are aware of it is affordability, specifically the cost of an internet-enabled handset.

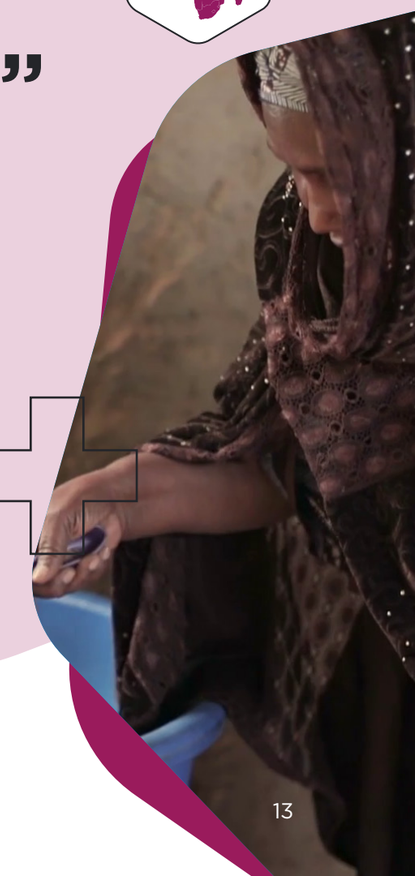
Digitising Utilities

Previously, we used to buy water. One day, they brought me a bill of 40,000 FCFA (70 USD) and that made me sick. Before this system, I did not control my bills, but now I control my bills because I don't spend a lot of money." "I find the system very easy - very, very, easy!"

Halima Issa - Subscriber
Service: SEEN

27%

of people living in Sub-Saharan Africa have access to safely-managed water services and **30%** have access to at least basic sanitation services (JMP, 2019).





> *We have many people coming to buy bananas from us, we sell to Twiga Foods because they have good prices. Payments from Twiga are good because they are immediate. They weigh your bananas and then pay you on the spot using mobile money. There are no delays.*
>
> **Patrick Macharia** - Farmer
> Service: Twiga Foods

Ecosystem Building

9

start-ups supported by the Ecosystem Accelerator and Mobile for Development Utilities Innovation Funds are ranked among the **70 most funded** African start-ups (Briter Bridges, 2021).

Africa



> *The Lumkani device actually woke me to go and check and I saw the fire. I got my children and we got out a small window. If it wasn't for the Lumkani device which woke me up, I would have lost my life.*
>
> **Nomfusi** - User
> Service: Lumkani

Humanitarian Response

More than

590 million

people in Africa lacked energy in 2020, an increase due to the pandemic (Internal Energy Agency, 2020).

Climate Resilience

14%

of global sites powered by renewable energy are in Sub-Saharan Africa, despite having only about **3%** of the world's mobile towers.

Africa

Digital Identity

49

countries across Africa mandate SIM registration, meaning approximately **1.05 billion** people must meet proof of identity requirements in order to access mobile services. Yet, **29%** of countries who mandate SIM registration do not possess a data protection and/or privacy framework.

Africa

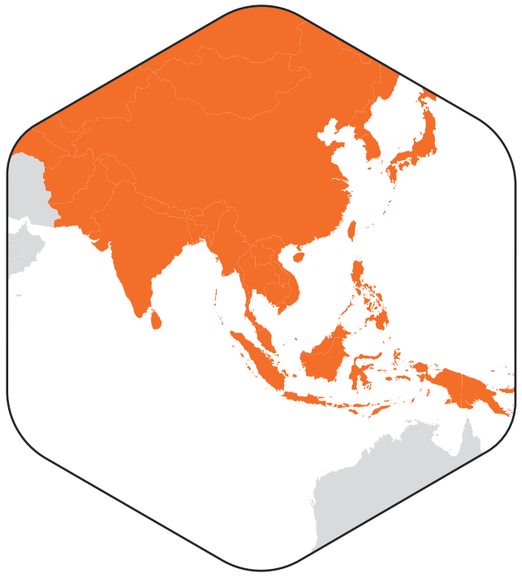
Humanitarian Response

8.8 million

in Eastern Africa are internally displaced people. **4.6 million** in Eastern Africa are refugees and asylum seekers. **4 million** in Eastern Africa are flood affected people. (UN OCHA, 2020).

Asia

Asia Pacific: Challenges, opportunities and our impact





I farm for a living. We farm by ourselves and take advice from each other. We often suffer loss at times because there is no one to guide us about farming properly. [When] I followed guidance [from Telenor...] about irrigation and fertilizer I got great results. My income increased and crops turned out golden, we are all very happy.

Zahoor Ahmed - Farmer in Pakistan
Service: Telenor Khushaal Zmeendaar

Agriculture

208 million

smallholder farmer households in South and Southeast Asia depend on agriculture for their livelihoods. Farmers in the region face significant challenges, including poor access to agronomic, market and weather information.

Asia Pacific



It has solved our electricity theft problems. Previously, electricity was stoles by tapping into our wire from some other shops, and their usage was measured in our electrical meter. We did not consume that much electricity but we were billed for it. Now that theft has stopped, our bill has decreased accordingly."

Musa - Customer and Shop Owner
Service: Pesco

Digitising Utilities

Grid unreliability continues to be a significant issue. The estimated cost of power outages and distortions such as power theft in Bangladesh, India and Pakistan is equivalent to

4% to 7% of GDP every year. (World Bank, 2018)

Assistive Technology

I want that, if I want to live my life the way I want to live with smartphones. It should be properly the expected way to access for people with disabilities."

Sumona Khan - Government worker
Service: Mobile internet user



To gain the full benefits of mobile, people need the opportunity to access and use mobile internet. There are large disability gaps in mobile internet use in countries such as Bangladesh and Pakistan:

87% and **71%**, respectively.

Asia Pacific

Ecosystem Building

I'm really happy with Ruangguru because it's so helpful. I get to ask all my school work until I finally understand all the materials. I think I'll use this app often to help me when I need it, it's more effective than having to go to tuition centres or offline private tutoring which are more expensive."

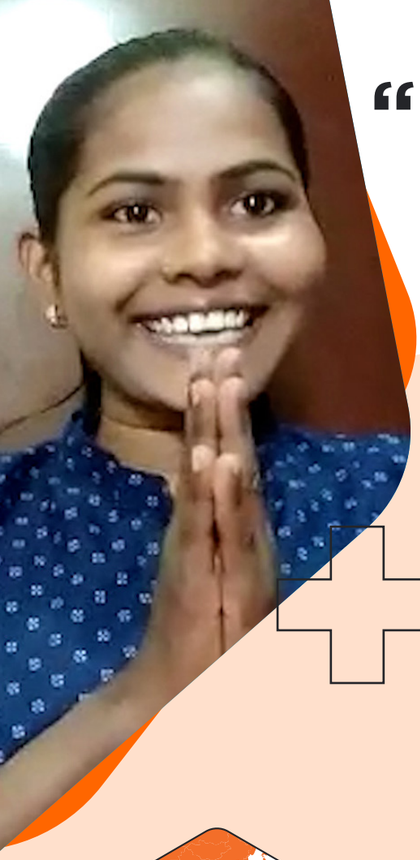
Finanda Rahman - Elementary School Student
in Bekasi, West Java
Service: Ruangguru



Indonesia has the fourth largest education system in the world, with over

50 million students and **4 million** teachers.

However, it is one of the lowest-performing. The country ranked **62 out of 72 countries** in the 2015 Program for International Student Assessment (PISA).



Gender Equality

“Mobile has changed our lives. We downloaded our second year syllabus using mobile internet. And if we didn’t understand a topic, we’d go to YouTube to understand it as our colleges were closed during the pandemic. The impact of mobile is huge. It has the power to change the world, connect the world. The world is in your hands if you have a mobile.”

Kavita Patel - Student
Service: Mobile internet

Women in South Asia are **19%** less likely than men to own a mobile and

36%

less likely than men to use mobile internet.

Financial Inclusion

“When my husband is sick and money is required in an emergency, I send my salary. Because the journey is long, about five or six hours, I save on fares and I get a lot of conveniences too..”

Rubina - Gomestic cleaner, Islamabad, Pakistan



In South Asia, digital transactions grew

3 times faster

than cash-in/cash-out transactions.
Date: Dec 2020

Asia Pacific



Digital Inclusion

“The mobile internet skills training has helped me and my community in many ways. I can get online news and keep updated with what is happening in the world. I can easily access information for my college programmes and communicate with my friends. I found out about my job through the internet. My life has changed completely.”

Jannatul Mukta - Pilot Participant
Service: MISTT in Bangladesh

Only **34%** of South Asia’s population is using mobile internet, meaning that the usage gap is **12 times greater** than the coverage gap. The top barrier to mobile internet adoption reported by consumers who are aware of it is a lack of knowledge and skills.

Asia Pacific

Ecosystem Building

“oDoc has allowed us to speak with qualified doctors, who are far from where I live, within a few minutes just by using a mobile device. It has made getting good healthcare simpler for me and my family without having to lose out on a day’s pay.”

Amila Suriarachchi - Garment Tech Worker
Service: oDoc



60%

of people living in Central and Southern Asia have access to safely-managed water services and **61%** per cent have access to at least basic sanitation services (JMP, 2019).



> *I have previously found working with companies a bit troublesome so I didn't use to work with companies earlier. With Kargo though, I know exactly what goods to transport, the exact pickup time and they also provide me with more jobs than I had before. I am very pleased working for Kargo."*
>
> **Ko Thiha Htun** - Independent Driver
> Service: Kargo

Asia Pacific



> *Following the Porac 2019 earthquake in the Philippines, infrastructure was assessed by the Nokia Saving Lives solution together with the Red Cross Team to improve awareness of structural damages. The NSL solution was used to assess potentially unseen damages in a preventive manner around a collapsed supermarket area.*
>
> **Nokia Saving Lives**
> M4H Innovation Fund

Ecosystem Building

Humanitarian Response

Connectivity

South Asia's coverage gap has reduced from **31%** in 2015 to **5%** in 2020. Following the leap in 4G coverage in India, other countries in the region have also expanded 4G coverage significantly in 2020.

Asia Pacific

Climate Resilience

Plastic production is expected to **double over the next two decades**, driven largely by the expanded use of plastic packaging in the region, where formal recycling systems may be underdeveloped or non-existent. Digital technology is helping by integrating the formal and informal recycling sectors, informing waste collection and providing traceability to the plastic supply chain.

Asia Pacific

Digital Identity

48

countries mandate SIM registration. An equivalent of **3.5 billion** people in the region must meet proof of identity requirements to gain access to a SIM card and, consequentially, mobile services. However, **31%** of countries that mandate SIM registration do not possess a data protection and/or privacy framework.

Middle East and North Africa



Middle East and North Africa:
Challenges, opportunities and our impact





> *Following the Beirut explosion in August 2020, the GSMA facilitated connections between UNDP and mobile network operators in Lebanon, enabling UNDP to leverage mobile technology to rapidly assess the affected populations' needs, disseminating a total of 2000+ messages and calls, and 718 completed surveys.*

Humanitarian Response

Over

45 million

people across the region will need some form of humanitarian assistance in 2021. (UN OCHA, 2021).

Middle East



> *The GSMA funding enables Rumie to expand and scale its critical contribution in Afghanistan by providing access to learning resources for Afghans, especially women and girls.*

Jamshid Hashim - Program Manager
Service: Rumie

Ecosystem Building

Connectivity

93%

of the Middle East and North Africa region population are covered by a mobile broadband network.

Gender Equality

Women in the Middle East and North Africa are **9%** less likely than men to own a mobile and

17%

less likely than men to use mobile internet.

Middle East

Financial Inclusion

In 2020, the average active customer transacted

$269

per month, the highest average transacted by active customers across all regions.

Digital Inclusion

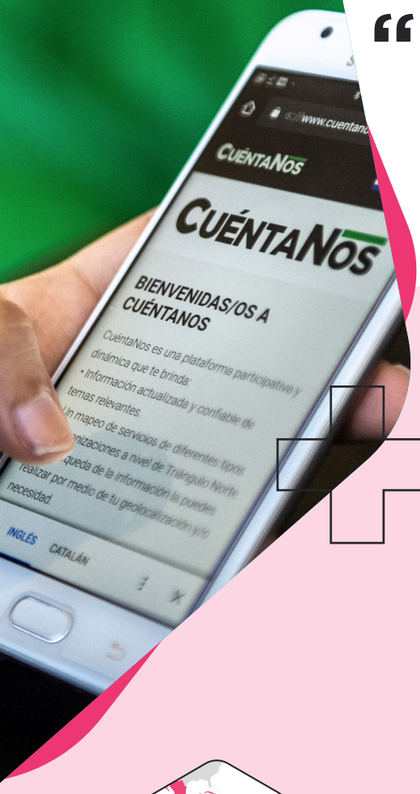
45%

of the population of the Middle East and North Africa region are using mobile internet but **48%** are not, even though they are covered by a mobile broadband network.

Americas

Americas: Challenges, opportunities and our impact





"It is difficult to see your children suffering and this support has made me feel much calmer as a mother. CuéntaNos is the light in our darkness. I see a change in Ana; she is more confident. Seeing my children healthy is a great peace of mind."

Lorena Mancia - User
Service: CuéntaNos

Gender Equality

Women in Latin America and the Caribbean are **1%** less likely than men to own a mobile and

2%

less likely than men to use mobile internet.

Connectivity

Operator investments have increased **4G coverage** to

87%

by the end of 2020, with **3G coverage** standing at **96%** - growing from **83%** in 2014.

Climate Resilience

Between 2014 and 2021, mobile towers were added globally at an estimated annual rate of over **4%**. Latin America outpaced this growth with a growth rate of

4.6%.

Americas



"CHANTER was really useful because before I didn't know what to do in case there was a hurricane. Now, I know more about cyclones, how to be prepared; we are going to have less damage from cyclones in communities, we have learnt to distinguish a yellow and red alert and actions to take in different scenarios.

Villejean - Farmer in Bayonnais, Haiti
Service: CHANTER

Humanitarian Response

Over

7 million

people are now displaced across international borders in the Americas, with increasing numbers displaced from El Salvador and Guatemala.

Financial Inclusion

Monthly active mobile accounts in Latin America and the Caribbean grew at

67%, the fastest growth of any region, largely driven by millions of people receiving relief funds from governments via mobile money.

Digital Identity

30

countries in the region implement mandatory SIM registration,

meaning that an estimated **337 million** people must present an official identity in order to register for a prepaid SIM card. Though, **27%** of these nations do not have a data protection and/or privacy framework in place.

Americas



> *We really need communication because telephones are a part of our lives. Because without one, we wouldn't have relations with our family or anything. And thanks to it, we have this nice relationship. And well, that's the story we wanted to tell the world."*

Roland and Yusmaira - Venezuelans displaced in Barranquilla, Colombia
Service: Mobile users

Humanitarian Response



Americas

40%

of the population in Latin America is still not using mobile internet. After Sub-Saharan Africa, Latin America has the least affordable data plans for the poorest 20% of the population.

Digital Inclusion



Americas

The disability gap can exist even in countries with a small gender gap, such as Brazil and Mexico. For instance, persons with disabilities are significantly less likely than non-disabled persons to own a smartphone in these countries by **46%** and **37%**, respectively.

Assistive Technology

Our programmes and funding partners

AgriTech

Digitising agri value chains to drive financial inclusion for rural populations and smallholder farmers.

Agriculture

UKaid from the British people · Australian Aid · Bill & Melinda Gates foundation · USAID From the American people

Climate Tech

Unlocking the power of digital technology to create a low-carbon and climate-resilient future.

Climate Resilience

UKaid from the British people

Connected Society

Unlocking the power of mobile internet.

Connectivity · **Digital Inclusion** · **Assistive Technology**

UKaid from the British people · Sweden Sverige

Connected Women

Accelerating digital and financial inclusion for women.

Gender Equality · **Digital Inclusion** · **Financial Inclusion**

UKaid from the British people · Sweden Sverige

Mobile for Development Reducing inequalities in our world

Our programmes and funding partners

Digital Utilities

Supporting urban resilience in low- and middle-income countries by enabling access to essential utility services through digital solutions.

Digitising Utilities · **Climate Resilience**

UKaid from the British people

Ecosystem Accelerator

Realising the potential of mobile innovation at scale.

Ecosystem Building

UKaid from the British people · Australian Aid · giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Mobile for Humanitarian Innovation

Accelerating the delivery and impact of digital humanitarian assistance.

Humanitarian Response

UKaid from the British people

Mobile Money

Accelerating the mobile money ecosystem for the underserved.

Financial Inclusion

Bill & Melinda Gates foundation



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