

GSMA Innovation Fund Impact Portfolio 2024-25

GSMA



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.



This material has been funded by UK International Development from the UK Government and is supported by the GSMA and its members. The views expressed do not necessarily reflect the UK Government's official policies.

GSMA Innovation Fund

The GSMA Innovation Fund accelerates digital tech solutions that are addressing key global challenges. Through grant funding and tailored venture building support, we enable innovative organisations in low- and middle-income countries (LMICs) to scale and amplify social and environmental impact.

For more information, please visit: www.gsma.com/innovationfund

Author: Simone Hinrichsen, Insights Manager,
GSMA Innovation Fund

Contributors: Wade Owojori, Director, GSMA Innovation Fund
Dr. Samjhana Humagain, Senior Marketing Manager, GSMA



This material has been funded by the Swedish International Development Cooperation Agency (Sida). Sida does not necessarily share the views expressed in this material. Responsibility for its contents rests entirely with the author.



Download on the
App Store

GET IT ON

Google Play



सहायता

720000

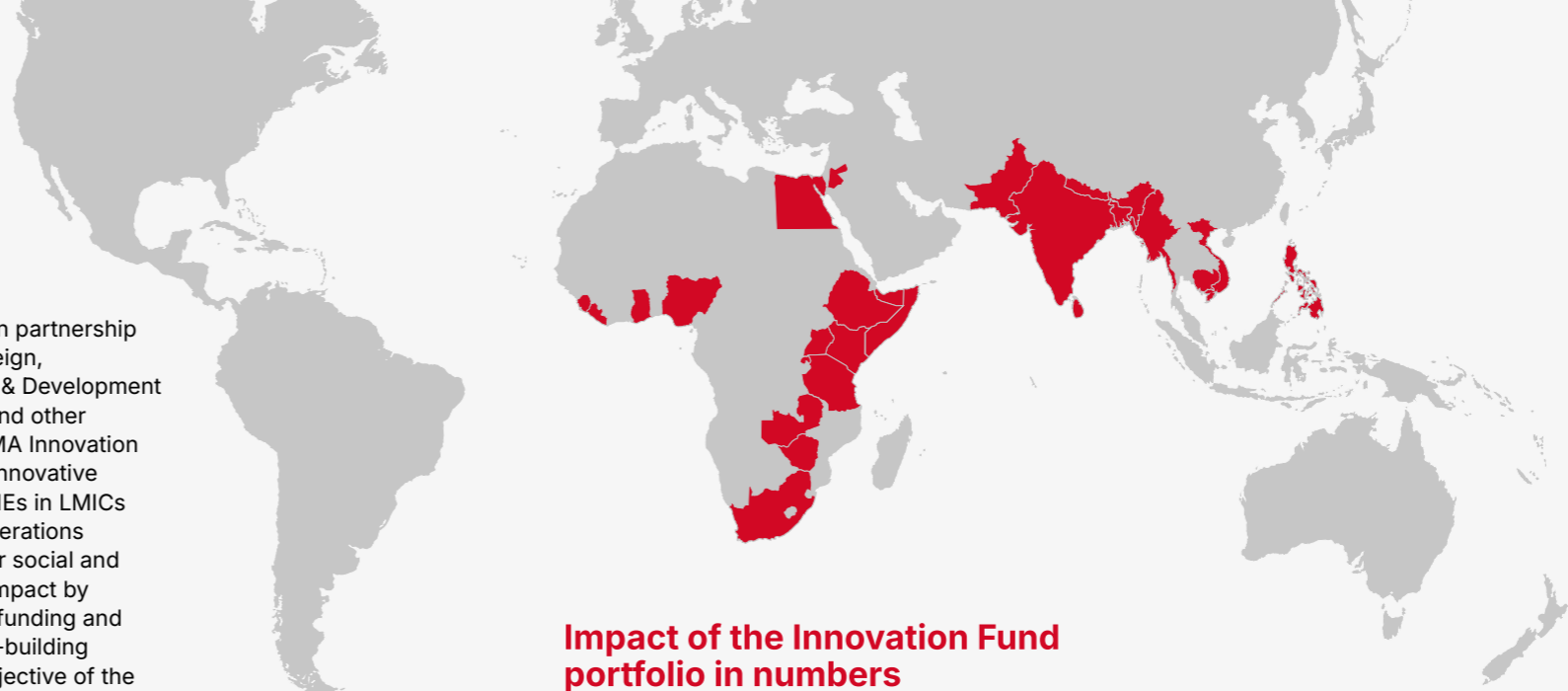
सेवा



The GSMA Innovation Fund accelerates digital tech solutions that address key global challenges.

Digital innovation provides a unique opportunity to accelerate socio-economic development and climate action in LMICs, where mobile phones are the main – and often only – way to connect to the internet. More than 3.7 billion people in LMICs now access the internet on a mobile phone, and this technology has the potential to foster economic growth, connect citizens to jobs and other services and improve their resilience to climate shocks. Mobile technology also enables startups and small and medium enterprises (SMEs) to scale, as it provides the infrastructure for payments, communications and content, and allows new and more direct access to markets.

In this context, in partnership with the UK Foreign, Commonwealth & Development Office (FCDO) and other donors, the GSMA Innovation Fund positions innovative startups and SMEs in LMICs to scale their operations and amplify their social and environmental impact by providing grant funding and tailored venture-building support. The objective of the Fund is to accelerate digital tech solutions that address key challenges faced by vulnerable populations in LMICs.



Impact of the Innovation Fund portfolio in numbers

(March 2021–March 2025)

Note: Data is current as of March 2025



30

Mobile network operator (MNO) partnerships established



15

Sustainable Development Goals (SDGs) addressed



£12m

Awarded in non-equity funding



62

Organisations



25

Countries



61.8m

People impacted by the portfolio organisations



£44.5m

In additional funding secured by the portfolio organisations

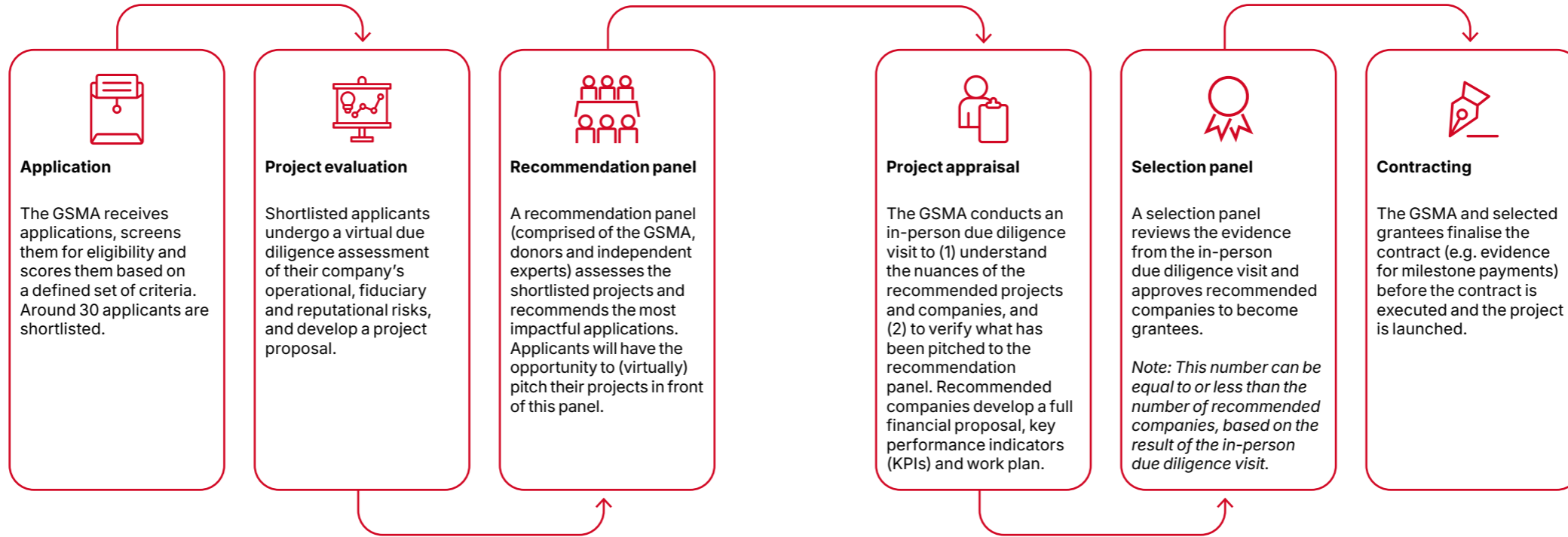
Contents

How the GSMA Innovation Fund works	8	Impact Portfolio Africa	22
The power of partnerships	10	Africa 118	24
Women-led organisations	17	Ensibuuko	25
Emerging tech for impact	18	WidEnergy	26
		Zonful Energy	27
		Signs Media	28
		Freetown Waste Transformers	29
		Koolboks	30
		Regenize	31
		Soso Care	32
		BENAA	33
		CoAmana	34
		Crop2Cash	35
		Dayaxa	36
		Hello Tractor	37
		J-Palm Liberia	38

Lersha	39	Impact Portfolio Asia	56	ActionAid	73
Simusolar	40			Buraq Integrated Solutions	74
Synnefa	41	Knowledge Platform	58	People in Need	75
Tearfund	42	Navana Tech	59	Rumsan	76
TAHMO	43	Orenda	60	NAXA	77
Bizy Tech	44	Vceela	61	Aloi	78
Farm to Feed	45	DeafTawk	62	Crop2X	79
Pricepally	46	I-Stem	63	HydroNeo	80
Sommalife	47	SignAble	64	InQube	81
UjuziKilimo	48	ATEC	65	Monsoon Tea Company	82
Drop Access Limited	49	Bhumijo	66	SenzAgro	83
E-Ride	50	Diyalo	67	CIS	84
Exuus	51	JanaJal	68	ConnectHear	85
Helium Health	52	ReCircle	69	Somleng	86
Patapia	53	BaKhabar Kissan	70	Viamo	87
Raagsan	54	Komunidad	71		
SmartWTI	55	GeoKrishi	72		

How the GSMA Innovation Fund works

To improve the operational efficiency of the GSMA Innovation Fund and respond to the funding needs of small growing businesses, the process has been refined based on a review of operational lessons and feedback from applicants.



The power of partnerships

Strategic partnerships can provide a pathway for startups to scale innovative solutions. Across the GSMA Innovation Fund portfolio, there are several examples of partnerships between startups and mobile network operators (MNOs), corporates, government institutions, as well as other startups. When done correctly, these partnerships can create “win-wins” for both parties, such as greater market access, increased market share, higher revenue and improved market reputation.

Partnerships established between GSMA Innovation Fund portfolio companies and MNOs in 2024:

Bizy Tech and Airtel Tanzania

In Tanzania, Bizy Tech and Airtel signed a **commercial agreement** to provide Internet of Things (IoT) SIM cards for Bizy Tech’s soil health toolkit. Through this partnership, Airtel Tanzania is enabling better soil health tests and gaining more subscribers to its IoT service based on the number of toolkits purchased by farmers.



Diyalo and Nepal Telecom

In Nepal, Diyalo and Nepal Telecom (NTC) signed a **commercial agreement** to supply machine-to-machine (M2M) SIM cards for Diyalo’s Watermark IoT meters. Diyalo strengthened its relationship with NTC following an initial partnership in which Diyalo outsourced its call centre services to NTC to handle customer complaints and queries.



Ensibuuko and Airtel Uganda

In Uganda, Airtel Uganda, Ensibuuko and FINCA entered a **commercial agreement** to facilitate loan disbursements to members of village savings and loans associations (VSLAs), with Airtel chosen as the licensed mobile banking partner to ensure regulatory adherence. The collaboration offers users access to affordable loans at a 3.2% monthly interest rate, lower than any other mobile loan offering.



Crop2X and Telenor

In Pakistan, Telenor has embedded its mAgri Platform on the Telenor app. This **integration partnership** provides Crop2X with market access to millions of farmers across Pakistan, empowering them to make informed decisions and optimise their farming practices. It provides Telenor with additional agricultural advisory services using satellite imagery and AI, allowing them to offer a crop classification and yield prediction model for the first time.



Sommalife and MTN Ghana

In Ghana, Sommalife is using an **integration partnership** to adopt MTN MoMo Open APIs in its TreeSyt software. This allows Sommalife to seamlessly handle payment collections and disbursements. MTN will onboard smallholder farmers in Sommalife's operating areas and deliver financial literacy training while working with Sommalife to establish MoMo agents in these communities.



BaKhabar Kissan and Zong Mobile

In Pakistan, BaKhabar Kissan (BKK) and Zong Mobile signed a **commercial agreement** to enhance farmers' access to agricultural advisory services. The partnership integrates BKK's weather and agricultural advisory services in Zong's mobile app and call centres, enabling farmers to make informed decisions to boost yields and income. Subscription revenue is shared between BKK and Zong, with the collaboration aimed at co-branding and expanding BKK's outreach.



Tearfund and Safaricom Ethiopia

In Ethiopia, Tearfund and Nyala Insurance signed a **commercial agreement** with Safaricom Ethiopia to facilitate payouts through M-PESA for their water balance index-based insurance. Customers can make insurance payments and other transactions through mobile money. This expands access to insurance to more customers and streamlines payment processes. This partnership is aligned with Safaricom Ethiopia's mission to drive digital financial inclusion.



ConnectHear and Ufone

In Pakistan, a **commercial partnership** between ConnectHear and Ufone supplies ConnectHear with data connectivity for its mobile app to be used by people with disabilities. AI-generated sign language alerts will be distributed throughout Ufone's network of 25 million subscribers. This collaboration aligns with Ufone's commitment to serve vulnerable communities in times of crisis.



Ensuring a match between strategic objectives is crucial to forming meaningful, win-win partnerships between startups and MNOs. Sommalife and MTN Ghana share a common mission of promoting financial inclusion for underserved populations, particularly women. Consequently, Sommalife partnered with MTN Ghana to enhance payment systems for smallholder farmers and field agents in northern Ghana by incorporating MTN's Mobile Money (MoMo) API in its TreeSyt software.



This makes transactions easier, faster and more secure. In addition, we plan to design and implement financial literacy training workshops tailored for smallholder farmers in remote communities. These workshops aim to enhance their financial management skills and bridge the digital divide, promoting greater inclusion in the digital financial ecosystem.

Richard Appiah, Business Development, Sommalife



Sommalife



Our partnership with Sommalife promotes financial inclusion, particularly for women in rural communities who are currently underserved. Sommalife aims to digitize the shea value chain in rural communities in northern Ghana through innovative solutions and enhanced financial access, aligning with our goals. Under an MoU, we plan to empower these shea farmers, who are predominantly women, by providing financial literacy education and mobile money wallets. This will enable them to receive payments via their phones and access additional MTN services such as micro-savings and loans. This collaboration offers dedicated support for the digitization of Sommalife's value chain. Additionally, MoMo leverages Sommalife's farmer network to better understand and address customer needs within these communities.

Cutie Mireku, Fintech Business Development, MTN Ghana



MoMo
from MTN

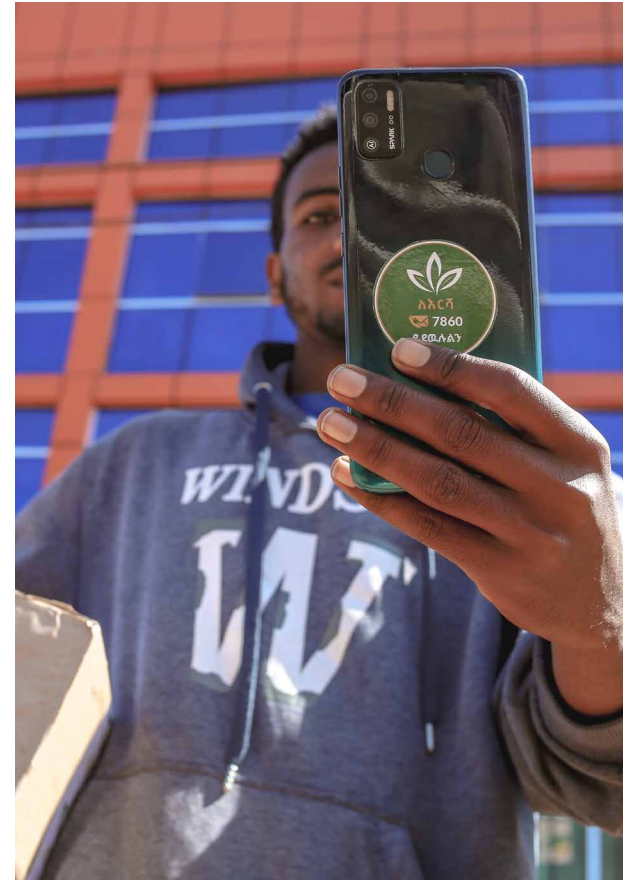


Beyond building synergies with MNOs, **partnerships with other influential organisations and local governments** can help to expand a startup's reach, broaden their addressable markets and boost their reputation. Other notable partnerships include:

- Ensibuuko's partnership with Community Saving and Investment Promotion (COMSIP) and UNCDF to scale its Mobis app in Malawi
- I-Stem's partnership with the Disability Division of India's Ministry of Social Justice and Empowerment to integrate its AI features in India's flagship mobile app for persons with disabilities
- ATEC's formal agreement with Engie and Nexus for the sale of Gold Standard carbon credits

- Africa 118's partnership with UNCDF and Google for a Digital Catalyst Programme for micro, small and medium enterprises (MSMEs) in Ethiopia, Rwanda, Uganda, Zambia and Malawi. The programme provides MSMEs with digital tools and skills to increase their visibility and grow their businesses through Africa 118's Digital Starter Pack (DSP) product and digital skills training.

There were also **two collaborations between Innovation Fund alumni** in 2024. These partnerships demonstrate the sustained impact of our work to support innovative business models. These noteworthy partnerships include an intercontinental merger, as well as a collaboration across African borders.



Partnerships between Innovation Fund alumni in 2024

Eneza Education, founded in Kenya, and **Knowledge Platform**, founded in Pakistan, merged to form a cross-continental edtech venture. This new venture will operate as Knowledge Platform from their new headquarters in Singapore and serve more than a million students in both regions through mobile, web and SMS technologies.

This merger combines Eneza's business-to-consumer (B2C) educational model in Africa with Knowledge Platform's business-to-business (B2B) strategy, to enhance educational equity in LMICs. Eneza's cost-effective, high-reach model will be integrated with Knowledge Platform's gamified learning strategies to deliver math, science and language education.



The merger of Eneza Education with Knowledge Platform has been such a boon for us. Separately our organisations had complementary strengths in product, market segment and customer channels, and a shared passion and vision for leveraging technology to improve learning outcomes in the global south. Together we are even stronger and better equipped to leverage the opportunities and meet the challenges of our time. We're now in the process of cross-launching our products, as well as planning our expansion into adjacent markets such as Ethiopia, DRC, Bangladesh and the Philippines. We're grateful to GSMA for the support it provided to our individual organisations in the past and for the key role it played in facilitating our first meeting and helping us build the mutual trust that culminated in our merger."

Wambura Kimunyu, CEO, Eneza Education



Partnerships between Innovation Fund alumni in 2024

Nigeria's **Koolboks** and Zambia's **WidEnergy** entered an agreement to distribute Koolboks' solar-powered freezers in Zambia.

Koolboks, a pay-as-you-go (PAYG) solar refrigeration provider, and WidEnergy, a women-led PAYG solar provider, met at an Acumen event in Kampala, Uganda. After a few months, they signed a distribution agreement enabling WidEnergy to distribute Koolboks freezers. There is no exclusivity in the partnership, although WidEnergy receives training and after-sales service. The goal of the partnership is to sell at least 500 units in Zambia in the next three years.

Both organisations are aligned in their mission to empower MSMEs, particularly those led by women, with affordable and reliable energy products. Koolboks has trained the WidEnergy team on its solar freezer systems, including product knowledge, installation, maintenance and hands-on troubleshooting.



Our partnership with WidEnergy marks a powerful step forward in our mission to democratise access to clean, reliable refrigeration. By combining Koolboks' technology with WidEnergy's deep community roots and commitment to women's empowerment, we're not only bringing solar freezers to Zambia – we're investing in livelihoods, food security and the future of women-led enterprise across the region.

Natalie Casey, CFO, Koolboks



KOOLBOKS
LIFE IS KOOL

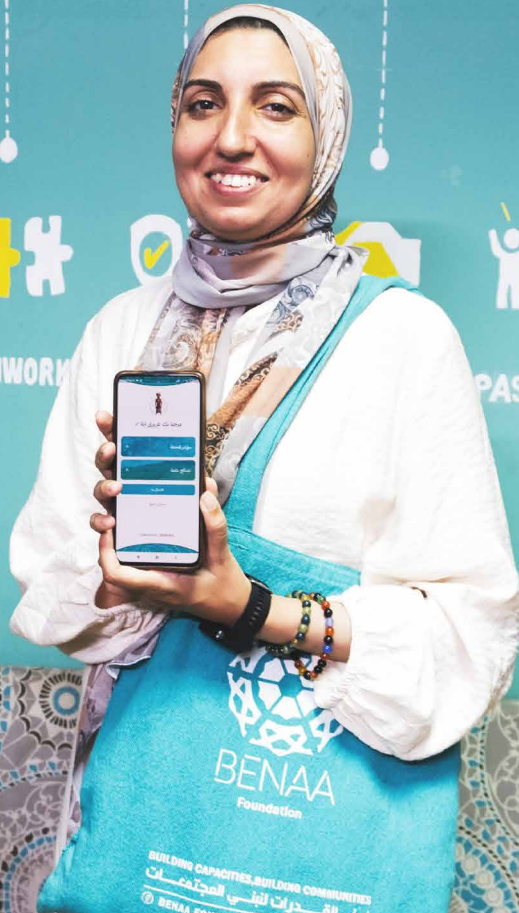


BENAA CORE VALUES



INNOVATION EFFICIENCY TEAMWORK

PASSION SUSTAINABILITY



BENAA
Foundation

BUILDING CAPACITIES. BUILDING COMMUNITIES
تعزيز القدرات لبنى المجتمعات
© BENAA FOUNDATION

Women-led organisations



of the organisations in the Impact Portfolio are founded, co-founded or led by women.

We define a “women-led” organisation as one that has more than 50% female founders, owners or executives. This is an improvement from 2023, when 21% were founded, co-founded or led by women.

The GSMA Innovation Fund is committed to:

- **Supporting local founders:** We provide funding and venture-building support to local entrepreneurs, particularly those leading gender-inclusive teams.
- **Gender inclusion:** We emphasise solutions that are accessible to both women and men, acknowledging and addressing social norms that might hinder gender inclusion.
- **Evaluation for inclusivity:** We assess how committed their cohorts are to gender inclusivity, aligning with the 2X Global Challenge, which seeks to mobilise gender-smart investments.
- **Sector and geographic diversity:** We support female founders across different sectors and regions globally.

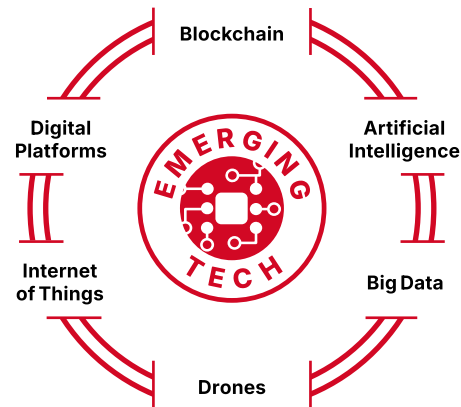
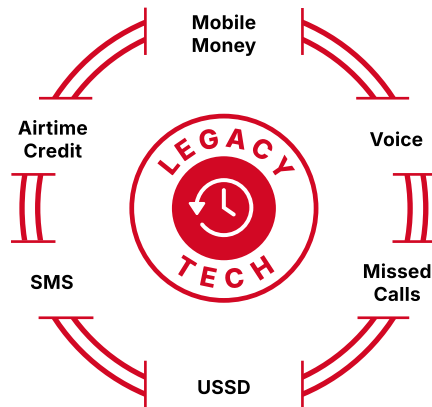
Of the 62 organisations supported by six rounds of the GSMA Innovation Fund between 2020 and 2024, 17 were founded, co-founded or led by women. For more on our funding and support for female-inclusive organisations in LMICs, read the GSMA Innovation Fund report [here](#).

It is crucial to consider this proportion in the context of global trends. In [Africa in 2024](#), female-founded startups raised a smaller share of deals (18%) and funding (7%) compared to 2023. In [Southeast Asia](#), funding for female tech founders has dropped by 42% from 2023. As funding and support decline in these regions, access to funding, technical assistance and relevant networks become even more important to supporting innovative female business leaders in LMICs.

Emerging tech for impact

GSMA Innovation Fund alumni are pioneering the use of emerging technologies, such as artificial intelligence (AI), the Internet of Things (IoT) and blockchain for the socio-economic benefit of vulnerable populations.

Through the Fund, startups and social enterprises receive assistance to develop and scale digital solutions. These solutions integrate traditional mobile technology, such as unstructured supplementary service data (USSD), interactive voice response (IVR) and short message service (SMS), with new technologies like AI, IoT and blockchain.



Reaching people who are digitally and financially excluded at scale requires easily accessible and cost-effective technologies. Feature phones are simple, cheap, functional and have a longer battery life,

which is important for those living in areas where electricity is inaccessible or unreliable. For this reason, some smartphone users also own basic and feature phones. By combining emerging and legacy technology, innovative startups can ensure their solutions reach low-income users and people in remote locations.

Of the 62 GSMA Innovation Fund grantees and alumni between 2020 and 2024:



17

use AI for services like translation, voice-to-text chatbots, call centre bots, content and report generation, and task automation

19



use IoT for services such as sending early warning system (EWS) messages, measure the performance of water distribution networks, remotely monitor refrigeration systems to enable preventative maintenance, and verify device usage to accurately mint certified carbon credits



04

use blockchain for traceability and to build trustworthy credit histories

By harnessing both emerging and legacy technology, innovative startups can scale their solutions and have a bigger impact. Here are a few examples of how GSMA Innovation Fund alumni combine emerging and legacy technology for maximum impact:



ATEC in Bangladesh combines its **IoT** eCook devices with digital payments via **mobile money**. Its mobile app allows users to track electricity usage in real time, access customer service support and make payments.



Rumsan in Nepal uses **blockchain** to provide timely emergency responses to help users prepare for a crisis. Early warning messages are sent to users via voice recordings and **SMS**.



Crop2Cash in Nigeria launched FarmAdvice, an **AI**-powered national hotline providing smallholder farmers with real-time, personalised agricultural advice in local languages through **IVR** and **USSD**.



Dayaxa in Somaliland developed a mobile **blockchain** app that increases the income of resin farmers by tracing where resin is sourced. Harvesters are paid a fair price compared to competitors, directly via **mobile money**, which provides a digital receipt of the payment.



IMPACT PORTFOLIO

Africa

2020 - 2024

32 organisations

16 countries

12 women-led organisations

14 MNO partnerships



GSMA

Digital inclusion

Assistive technology

Digital urban services

Climate resilience and adaptation

Anticipatory humanitarian action

Climate resilience and adaptation 2.0

Humanitarian challenges

Freetown Waste Transformers

J-Palm Liberia

TAHMO

Sommalife

Koolboks

Soso Care

CoAmana

Crop2Cash

Hello Tractor

Pricepally

Helium Health

BENAA

SIERRA LEONE

LIBERIA

GHANA

Ensibuuko

Patapia

Exuus

Zonful Energy

Regenize

EGYPT

NIGERIA

UGANDA

RWANDA

ZIMBABWE

SOUTH AFRICA

JORDAN

SOMALILAND

SOMALIA

ETHIOPIA

KENYA

TANZANIA

ZAMBIA

SmartWTI

Dayaxa

Raagsan

Africa 118

Lersha

Tearfund

Signs Media

Synnefa

Farm to Feed

UjuziKilimo

Drop Access Limited

Simusolar

Bizy Tech

WidEnergy

E-Ride

GSMA

Africa

Africa's Information Services Solution

COUNTRY

Ethiopia

FOCUS AREA

E-commerce

TEAM

11-50

MNO PARTNER

Ethio Telecom



Africa 118

is a digital marketing platform that enables MSMEs to connect to the internet to access new markets.

Africa 118 also developed a digital job tech marketplace (Taskmoby) to connect service providers and contractors to businesses.



PROBLEM

Less than 10% of SMEs in Ethiopia have a digital presence. Many SMEs lack the digital skills and expertise required to build and manage their online presence.

Unemployment in Ethiopia's secondary cities is approximately 27%, which is higher than Addis Ababa where the unemployment rate is 22%.



GSMA PROJECT

In March 2021, Africa 118 received a GSMA grant to provide an affordable Mobile Digital Starter Pack to Ethiopian SMEs to help them build a strong digital presence and grow their business.

In April 2024, Africa 118 received an additional GSMA grant to expand their job tech marketplace, Taskmoby, from Addis Ababa to three additional Ethiopian cities with populations of more than 1.5 million.



OUTCOMES

- Established a partnership with Ethio Telecom.
- Launched Taskcenter for SMEs to access work tools and supplies, and Taskcredit to access credit based on credit history.



TRACTION

- As of March 2024, Africa 118's Digital Start Pack has been adopted by more than 4,000 SMEs, significantly boosting their digital presence and market reach. Notably, more than 2,800 of these SMEs are led by women, highlighting the role of the initiative in empowering female entrepreneurs.
- As of January 2025, the Taskmoby platform is live in Addis Ababa, Adama, Dire Dawa and Hawassa, and has increased the number of skilled technicians with jobs from 134 in June 2024 to just over 1800.



COUNTRY
Uganda

FOCUS AREA
Fintech

TEAM
11-50

MNO PARTNER
Airtel, MTN Uganda



Ensibuuko

is a fintech that promotes the adoption of digital financial products and improving access to mobile devices and services in rural areas.



PROBLEM

Savings groups in rural Uganda tend to rely on paper record-keeping and analogue systems that are unconnected to the larger financial ecosystem. Savings groups lack knowledge of relevant digital products and services and the skills required to use them, which are major barriers for rural customers to adopt internet services.



GSMA PROJECT

In March 2021, Ensibuuko received a GSMA grant to develop a digital skills training kit for local rural customers that leveraged its network of digital field agents to deliver the digital literacy training to village savings groups in various rural locations.

In April 2024, Ensibuuko received an additional GSMA grant to create an Android banking app with mobile money product offerings, such as bill payments, fund transfers and access to loans.



OUTCOMES

- Established strategic partnerships with MTN Uganda and Airtel to integrate mobile money services. The partnership with MTN includes reverse billing for internet data and allows users to always be connected.
- Developed credit scoring and access to digital loans for VSLA members, enabling them to borrow outside their savings pool. Ensibuuko has replicated this model in Tanzania, Malawi, Ghana and Côte d'Ivoire.



TRACTION

- As of March 2024, more than 3,900 VSLAs with 239,000 members have received digital literacy training.
- As of January 2025, more than 149,000 members of savings and credit cooperative organisations (SACCO) access financial services via USSD (97%) or the Android app (93%).



**COUNTRY**

Zambia

FOCUS AREA

Energy asset financing

TEAM

11-50

**WidEnergy**

provides last-mile delivery of clean, reliable and affordable energy and connectivity solutions, as well as affordable access to mobile phones.

**PROBLEM**

In Zambia, the main barriers to mobile internet use are a lack of digital skills and accessible and affordable smartphones and data. Among rural and peri-urban populations, mobile internet adoption was 10% in mid-2019, which is considerably lower than the national average of 24%. There is also a mobile gender gap, particularly in rural areas, which must also be addressed.

**GSMA PROJECT**

In March 2021, WidEnergy received a GSMA grant to offer PAYG smartphones to their solar home systems (SHS) customers who had demonstrated a good track record with payments, ensuring that reliable customers had access to affordable mobile technology.

**OUTCOMES**

As of September 2023, 46% of users self-reported being new mobile internet users because of the smartphones they purchased from WidEnergy.

**TRACTION**

As of March 2024, 1,306 customers purchased the smartphone product, including 470 women.



COUNTRY
Zimbabwe

FOCUS AREA
Energy asset financing

TEAM
11-50

MNO PARTNER
EcoNet

Zonful Energy

provides modular, decentralised and scalable solar energy systems on a PAYG basis to rural, urban and peri-urban off-grid consumers.



PROBLEM

In Zimbabwe, 56.5% of the population uses the internet and 7.6 million people are offline.



GSMA PROJECT

In March 2021, Zonful Energy received a GSMA grant to distribute low-cost smartphones and data bundles with 24-month data plans, and to tackle the digital skills barrier by teaching customers how to use mobile internet through the GSMA Mobile Internet Skills Training Toolkit (MISTT), in collaboration with Econet.



OUTCOMES

Received debt investment from the LEO Impact Fund in April 2025.



TRACTION

As of February 2025, 63,000 customers purchased PAYG smartphones.





SIGNS MEDIA KENYA LIMITED

COUNTRY

Kenya

FOCUS AREA

Assistivetech

TEAM

51-200

MNO PARTNER

Safaricom



Signs Media

provides real-time, on-demand access to sign language interpretation services.



PROBLEM

Sign language interpreters play a crucial role in the lives of people with hearing impairments, helping them to communicate effectively and access services. In Kenya, there are only 500 sign language interpreters serving the needs of more than 260,000 people with hearing impairments, and they are primarily in urban areas. These services remain out of reach for low-income and rural populations.



GSMA PROJECT

In July 2021, Signs Media received a GSMA grant to provide affordable, high-quality, virtual, on-demand sign language interpretation services to the hearing impaired through the assistALL mobile app. The grant was used to develop the [assistALL mobile app](#) into a final product for the market. The grant was also used for training for sign language interpreters on the app and acquiring users (sign language interpreters and persons with hearing impairments).



OUTCOMES

- The assistALL App is live on Safaricom's M-PESA Super App
- More than 150 B2B customers were onboarded to the app, removing the barrier to serving deaf customers due to the absence of an on-demand communication tool.



TRACTION

As of March 2025, just over 12,000 users have accessed assistALL for sign language interpretation services, enabling them to connect with people and institutions such as banks, clinics and hospitals.



COUNTRY
Sierra Leone

FOCUS AREA
Energy

TEAM
1-10

MNO PARTNER
Orange, AfriCell

Freetown Waste Transformers

turns organic waste into energy, replacing diesel generators with green technology.



PROBLEM

Limited access to electricity and an unreliable grid has led to mass use of diesel generators in Sierra Leone, especially by MSMEs. The waste management infrastructure in Freetown also has inefficient collection processes, making waste management a major challenge.



GSMA PROJECT

In March 2022, Freetown Waste Transformers received a GSMA grant to digitalise the waste collection process. It implemented a GPS mobile mapping app to improve the efficiency of existing waste coordination.

In April 2024, Freetown Waste Transformers received another GSMA grant to make its Dортиbox solution more accessible – through USSD, voice guidance and visual symbols – and improve the user experience for low-literacy users.



OUTCOMES

- Launched the mobile app DortiBox for waste collectors and households.
- Added Orange Money integration to Dортиbox, allowing users to make transactions using mobile money during the grant period.
- Formed a strategic partnership with the Freetown City Council.



TRACTION

As of December 2024, more than 800 users (waste collectors and household members) were actively using Dортиbox for waste collection.



KOOLBOKS

LIFE IS KOOL

COUNTRY

Nigeria

FOCUS AREAS

Energy
AI
IoT

TEAM

51-200

MNO PARTNER

Orange

Koolboks

produces ecofriendly refrigeration accessible in the absence of power and sunlight to everyone who needs it.



PROBLEM

In Nigeria, up to 40% of all food produced is wasted, largely due to a lack of access to cold storage. Even where there is access to the grid, power is unreliable and back-up diesel generators are ubiquitous. These generators are both more expensive for customers and harmful to the environment.



GSMA PROJECT

In March 2022, Koolboks received a GSMA grant to launch and scale its off-grid refrigeration solution in Nigeria, targeting fish traders, the majority of whom are women. The GSMA project focused on two models from Koolboks' product range. With the introduction of IoT, Koolboks monitors its refrigeration systems remotely and evolved its offering to include cooling-as-a-service.



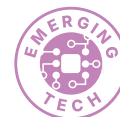
OUTCOMES

Secured investments from Beyond the Grid Fund for Africa, the French Facility for the Global Environment (FFEM), and others.



TRACTION

- More than 290 fish traders purchased a Koolboks freezer, a more than 110% increase in sales. Of these users, 205 customers are women-led MSMEs.
- At the end of the grant period, 85% of users (out of 140) reported increased revenue from using the refrigerators, and 87% reported a reduction in wasted fish.





COUNTRY
South Africa

FOCUS AREAS
Recycling and
Waste Management

TEAM
1-10

MNO PARTNER
MTN Ayoba

Regenize

is a waste management startup that recycles waste collected from households, apartments and offices. The waste is organised and tracked through mobile technology.



PROBLEM

South Africa's recycling sector depends on the roughly 90,000 waste pickers who collect material from households and businesses – up to 90% of all recycled paper and packaging waste. They work in dangerous conditions, searching through bins or landfills as they do not have access to clean, separated recyclables.



GSMA PROJECT

In March 2022, Regenize received a GSMA grant to scale its solution, It established new decentralised recycling hubs (DRH) and developed the Recycling app and Remali app (virtual currency). The virtual currency can be redeemed for various rewards, such as airtime, data and grocery vouchers.



OUTCOMES

Raised funding from EEP Africa and E-squared to scale its solar-powered hubs.



TRACTION

As of March 2025, more than 6,600 households use the Regenize waste collection service for recycling and to earn Remali. They also established 10 DRHs in low- and low-middle-income communities in South Africa.



**COUNTRY**

Nigeria

FOCUS AREASPlastics and Waste Management
Health insurance**TEAM**

1-10

MNO PARTNER

Orange

Soso Care

provides microhealth insurance through waste plastic recycling.

**PROBLEM**

Nigeria generates more than 34 million tonnes of waste annually, including 20 billion plastic bottles, less than 10% of which is collected, sorted and recycled. At the same time, because of pervasive poverty and poor healthcare financing (less than 3% of Nigeria's 200 million people have health insurance), quality healthcare is out of reach for most Nigerians.

**GSMA PROJECT**

In March 2022, Soso Care received a GSMA grant to expand its services. It purchased recyclable waste from low-income individuals and sold it to intermediaries and recycling companies. The proceeds fund health insurance premiums for participating households. The grant funding was also used to automate Soso Care's systems through the introduction of mobile apps and improving waste collection processes, increasing the value generated from waste.

**OUTCOMES**

- Launched a mobile app and USSD service, allowing users to search for agents, receive payments and purchase insurance in exchange for waste.
- Launched waste recycling facilities in two states (Kaduna and Rivers State), which process 30,000 kg of waste every month, on average.
- 65% of the informal waste collectors using the health insurance premium function reported improved health care.

**TRACTION**

As of March 2024, more than 6,900 informal waste collectors use the app to process waste collection requests.



BENAA
Foundation

COUNTRY
Egypt

FOCUS AREA
Water
IoT

TEAM
11-50



BENaA

supports water resource management, using IoT solutions to help convert wastewater into irrigation water for small farms in rural Egypt.



PROBLEM

Small rural communities in Egypt lack access to infrastructure provided by the government, such as sanitation. This contributes to soil, surface and groundwater pollution, the proliferation of water-borne diseases and food contamination. They also face escalating water shortages due to population growth and climate change – a particular challenge for the agricultural sector, which consumes 86% of Egypt's water resources.



GSMA PROJECT

In November 2022, BENAA received a GSMA grant to implement an IoT system in decentralised treatment units. This system monitors and analyses the quality of treated wastewater and concentrations of nutrients.



OUTCOMES

- 10 water treatment units were installed, increasing access to treated wastewater for 20,000 individuals.
- As of June 2024, more than 50 million litres of wastewater were treated and reused in irrigation.
- More than 2,000 farmers now benefit from app-based agricultural advisory services to better adapt to climate change.

To find out more, read the [BENAA case study](#).





COUNTRY
Nigeria

FOCUS AREA
Agriculture

TEAM
1-10

MNO PARTNER
MTN Nigeria



PROBLEM

Over 70% of Nigerians live in rural agrarian communities affected by rising populations and desertification. Farm production in northern Nigeria is disrupted by heavy rains and prolonged periods of drought, and farmers lack access to information and crucial products like drought-resistant seeds.



GSMA PROJECT

In November 2022, CoAmana received a GSMA grant to help 5,000 farmers adopt best practices and use the Amana Market platform to access information on climate change adaptation, resilience and drought-resistant seeds.



OUTCOMES

CoAmana has secured funding from leading investors, such as Village Capital and Emerald Africa.



TRACTION

- As of April 2024, more than 21,000 farmers use the Amana Market platform to order products, access climate-smart information and view payment plans.
- More than 250 suppliers and sales agents procure products from farmers through the Amana Market platform.

To find out more, read the [CoAmana case study](#).

CoAmana's

digital agricultural marketplace management provides farmers and stakeholders in the agri-value chain with essential digital tools. This platform improves agricultural productivity and helps farmers manage financial risks related to drought, purchase drought-resistant seeds and access information on best practices and financial services.



COUNTRY
Nigeria

FOCUS AREAS
Agriculture
AI

TEAM
11-50

MNO PARTNER
MTN Nigeria

Crop2Cash

helps farmers adapt to drought with climate-smart farming content and the management of financial risks. It connects farmers to high-yield, drought-resistant maize seeds through a digital marketplace via USSD.



PROBLEM

Frequent drought and high temperatures from climate change have negative impacts on maize production in Nigeria. Farmers in northern Nigeria struggle to access finance to scale and transform their operations to build resilience.



GSMA PROJECT

In November 2022, Crop2Cash received a GSMA grant to connect farmers with high-yield, drought-resistant seeds via USSD, to access finance and to provide tailored SMS weather advice on best agricultural practices. The grant also enabled Crop2Cash to develop an AI-powered IVR service offering personalised agricultural advisory in local languages.



OUTCOMES

Crop2Cash has secured funding in the form of equity and convertible notes from investors such as Village Capital and Marula Square.



TRACTION

As of March 2025, more than 80,000 farmers use the USSD solution to access agricultural inputs, access finance and receive advisory support.





COUNTRY
Somaliland

FOCUS AREA
Agriculture

TEAM
11-50

Dayaxa

works with farmers in Somaliland to harvest sustainable produce, achieve fair pricing and improve living standards for farming communities.



PROBLEM

Communities in the Sanaag region of Somaliland do not set prices for the frankincense resin that they tap from trees, with all the value in the supply chain taken by resin traders. Combined with the impact of climate change, these harvesters have few incentives to harvest sustainably, instead overharvesting to maximise short-term income.



GSMA PROJECT

In November 2022, Dayaxa received a GSMA grant to improve earnings for resin farmers through a mobile blockchain app that traces where resin is sourced and the price paid to harvesters. The grant was also used to develop a tree health mobile app for traceability and ecological monitoring.



OUTCOMES

- Developing the traceability app helped Dayaxa secure new commercial deals for the purchase of resin. This validated the importance of traceability for buyers.
- Dayaxa pays farmers 150% more per kilogram of resin than traditional intermediaries and brokers.



TRACTION

- As of March 2025, more than 1,380 frankincense resin harvesters and sorters use the traceability app to monitor resin and improve transparency throughout the value chain.
- The status of more than 2,700 frankincense trees is now being tracked through the blockchain-enabled traceability app.

To find out more, read the [Dayaxa case study](#).



hello tractor

COUNTRY

Nigeria



FOCUS AREAS

Agriculture
AI

TEAM

51-100

Hello Tractor

is a digital platform connecting tractor owners and farmers through a farm equipment sharing app and GPS fleet management solution. This helps farming communities improve planning and preparedness in the face of unpredictable rainfall patterns.



PROBLEM

Manual labour is 2.5 times more expensive and 40 times slower than modern tractors. Despite inefficiencies, small-scale farmers in Africa cannot afford machinery like tractors and combine harvesters. Irregular and unpredictable rainfall patterns, combined with a lack of data on mechanisation services that cause significant tractor service delays and underuse, lead to low crop yields.



GSMA PROJECT

In November 2022, Hello Tractor received a GSMA grant to optimise the provision of tractor services to farmers to improve harvesting and yields and build a more resilient, adaptive community of farmers and tractor owners.



OUTCOMES

Hello Tractor received funding from Heifer International in 2022 to provide loans for tractor purchases.



TRACTION

- As of March 2024, more than 3,500 farmers received agricultural advisory services via SMS.
- As of March 2024, more than 2,400 hectares of land were serviced with tractors.

To find out more, read the Hello Tractor [case study](#).





J-Palm Liberia

COUNTRY
Liberia

FOCUS AREAS
Agriculture
Blockchain

TEAM
51-200

J-Palm Liberia

manufactures natural health and beauty products from palm kernel oil and uses blockchain technology for traceability.



PROBLEM

Liberia's smallholder farmers lack access to processing machinery and markets for their palm kernels. As a result, they largely throw away the palm kernels, losing thousands of dollars in potential income. This technology gap causes farming communities to miss out on important economic development opportunities.



GSMA PROJECT

In November 2022, J-Palm received a GSMA grant to develop two mobile blockchain apps for transparency and traceability in Liberia's wild-harvest palm oil supply chains. This helps protect forests, improve harvesters' incomes and livelihoods and produce sustainable palm oil products that strengthen community resilience to climate change.



OUTCOMES

- Developing the traceability technology helped J-Palm secure commercial contracts with a US soap manufacturer and boost farmer incomes.
- J-Palm built 30 mini processing mills, which reduce processing time, water consumption and increase oil extraction rates.



TRACTION

- More than 3,000 palm harvesters and collectors use the traceability app to improve transparency throughout the value chain, from palm fruit to palm oil and palm kernel.
- The status of more than 139 trees is now being tracked through the blockchain-enabled traceability app.

To find out more, read the [J-Palm case study](#).





COUNTRY
Ethiopia
FOCUS AREA
Agriculture

TEAM
51-200

MNO PARTNERS
Ethio Telecom,
Safaricom Ethiopia



Lersha

provides digital services to enable smallholder farmers to access farm inputs, hire mechanisation services and get advice, credit and insurance through an in-house call centre, mobile app and Lersha agents.



PROBLEM

Smallholder farmers in Ethiopia account for 95% of production, often managing multiple farm enterprises while contending with changing climatic and uncertain socio-economic conditions. Farmers need additional information on the availability and prices of recommended farm inputs, a mechanisation service for their short planting window, expected market prices for their produce and access to credit services.



GSMA PROJECT

In November 2022, Lersha received a GSMA grant to expand the reach of its platform among smallholder farmers by promoting agricultural finance and climate-risk insurance. The grant also enhanced the Lersha platform with more customised extension services and frequent agro-climate advisories.



OUTCOMES

Received funding investment to hire more than 1,000 Lersha agents – digitally-savvy youth in rural areas with agricultural degrees – while also focusing on financial education and awareness creation.



TRACTION

- As of September 2024, more than 620,000 farmers access the Lersha platform for agro-climate advisory information, agricultural finance and crop insurance and mechanisation and input services.
- Offered agricultural finance to 76,000 farmers, with this number growing substantially.
- Provided insurance bundled with finance to more than 19,000 farmers, improving their ability to adapt to climate shocks.
- Issued insurance payments to more than 11,000 farmers, improving their ability to adapt to climate shocks.

To find out more, read the [Lersha case study](#).



**COUNTRY**

Tanzania

FOCUS AREASAgriculture
IoT**TEAM**

51-200

MNO PARTNERS

Tigo Tanzania

**Simusolar**

supports fishers to secure livelihoods, adapt to weather changes and sustain fisheries management through IoT-enabled productivity and activity tracking equipment.

**PROBLEM**

For artisanal fishers, rising water temperatures in Lake Victoria are leading to a lower catch of a small fish critical to the local economy. Volatile weather and a lack of real-time information also make it difficult for local fishers to plan their fishing and dry the fish for transport, which leads to waste. Overfishing is difficult to regulate due to the resources required to cover the large territory.

**GSMA PROJECT**

In November 2022, Simusolar received a GSMA grant to launch IoT fishing lights that are locatable, trackable, energy efficient and controlled via smartphone. Paired with a mobile app, it tracks usage, monitors weather and manages fishing operations. The tracking feature provides anonymised data to the Ministry of Fisheries, aiding in their digitalisation efforts.

**OUTCOMES**

Raised funding in the form of convertible notes and grants from Treehouse Investments, Chroma Impact and others.

**TRACTION**

As of March 2025, just over 490 fishers purchased an energy-efficient IoT fishing light.





COUNTRY

Kenya

FOCUS AREAS

Agriculture

IoT

TEAM

11-50



Synnefa

is a smart farming company that provides holistic hardware and software solutions for smallholder farmers to increase yields and productivity while reducing risk.



PROBLEM

For smallholder farmers, a lack of accurate and timely data leads to low crop yields and greater vulnerability to humanitarian crises. Farmers often have limited access to resources and are disproportionately affected by climate change.



GSMA PROJECT

In November 2023, Synnefa received a GSMA grant to incorporate satellite imagery in its farm management platform, FarmCloud, to offer real-time data on crop health and weather patterns. The grant also allowed Synnefa to create a USSD-based interface for smallholder farmers who do not have access to smartphones or high-speed internet.



OUTCOMES

Successfully tested and validated the FarmCloud satellite service in Makueni and Kitui counties to ensure it meets the needs of farmers and provides accurate and actionable information. The solution is now ready to be scaled across Kenya and Rwanda.



TRACTION

- As of March 2025, more than 3,000 farmers use FarmCloud satellite services via USSD, ensuring access for non-smartphone users.
- Received funding from the Efficiency for Access Coalition to advance clean energy agricultural technologies and enhance post-harvest resilience and productivity.



tearfund

COUNTRY

Ethiopia

FOCUS AREA

Early warning systems

TEAM

51-200

MNO PARTNER

Safaricom Ethiopia



Tearfund

focuses on meeting emergency needs, mobilising churches, transforming communities and changing society to tackle extreme policy through humanitarian response, community development and advocacy and influencing.



PROBLEM

Ethiopia's lowland regions are experiencing a fifth consecutive drought, severely affecting agro-pastoralist communities whose livelihoods depend on climate-sensitive activities. These communities suffer from lack of access to real-time weather information, insurance products and effective weather forecasting.



GSMA PROJECT

In November 2023, Tearfund received a GSMA grant to educate cooperative members, self-help groups and smallholder farmers on the benefits of parametric insurance. It also provides parametric insurance for agro-pastoralist communities in partnership with Nyala, Yokahu Insurance and jamii.one.



TRACTION

- As of March 2025, more than 800 smallholder groups and cooperatives have been digitalised.
- More than 43,000 community members have received weather advisory and agricultural advice via SMS and IVR.



COUNTRY
Ghana

FOCUS AREA
Early warning systems

TEAM
11-50

MNO PARTNERS
Airtel Tigo, MTN Ghana

TAHMO's

rainfall product combines ground data, commercial microwave links (CML) and satellite data for accurate and timely information, which forms the basis for flood early warning systems (FEWS).



PROBLEM

Urban flooding in Ghana, particularly in the Aboabo community of Kumasi, has become increasingly devastating due to climate change, rapid population growth and urbanisation, leading to significant property damage and loss of life. Early warning systems (EWS) for these vulnerable areas are often impractical due to the high costs of specialised equipment, the complexity of disseminating information and the substantial resources needed for maintenance.



GSMA PROJECT

In November 2023, TAHMO received a GSMA grant to develop affordable and sustainable FEWS by conducting co-creation workshops, repurposing mobile technology for rainfall monitoring via CML and installing low-cost hydro-meteorological sensors. Various data sets are integrated in these systems, and TAHMO employs a citizen science approach for data collection through smartphone videos. It has developed a business model to ensure the FEWS continues to operate after the grant period.



TRACTION

- As of March 2025, the flood early warning system repurposing existing mobile technology (FEWS-REMT) has been successfully designed and tested, disseminating early warning messages and IVR calls of imminent flooding to more than 500 residents of Aboabo region and reaching more than 2,000 indirect users.





COUNTRY
Tanzania

FOCUS AREAS
Agriculture
AI

TEAM
11-50

MNO PARTNERS
Airtel Tanzania

Bizy Tech's

platform optimises farming practices, enhances productivity, contributes to food security and improves farmers' incomes.



PROBLEM

In Tanzania, agriculture accounts for 26% of GDP and involves 80% of households. In Dodoma and Singida, 67,000 smallholder farmers are facing the impacts of climate change, including unpredictable weather and increased temperatures, which lower productivity and degrade soil, worsening food insecurity. Limited access to financial services intensifies these challenges.



GSMA PROJECT

In March 2024, Bizy Tech received a GSMA grant to strengthen its KILIMO BaNDO digital marketplace by launching KILIMO BORA, an AI-powered agronomy advisory module. Kilimo Bora delivers personalised, real-time, weather-triggered farming insights via mobile app, SMS and USSD. Through KILIMO BORA, farmers receive actionable, location-specific recommendations on soil health, input use and crop management, helping them to build resilience and increase productivity.

KILIMO BaNDO combines these advisory services with access to quality inputs, financial services and markets, creating a holistic platform to support rural agricultural transformation.



TRACTION

- As of March 2025, more than 36,000 farmers have active subscriptions, receiving continuous tailored advice on demand.
- Just over 23,000 subscribers are women farmers.
- Farmers adopting advisory practices have increased productivity by up to 31%, with monitoring showing that more than 60% have changed at least one key farming behaviour (particularly fertiliser use and the timing of planting).





COUNTRY

Kenya

FOCUS AREA

Agriculture

TEAM

11-50



Farm to Feed

(FTF) connects smallholder farmers to buyers, enabling them to sell their produce and earn additional income while reducing food waste.



PROBLEM

In Sub-Saharan Africa, half of the fruits and vegetables produced do not reach consumers, leading to financial losses for farmers and higher food prices. In Kenya, smallholder farmers are particularly affected as their produce is prone to quality issues due to extreme weather and limited access to affordable, high-quality agricultural inputs. This often results in produce being rejected for its appearance or quality, causing farmers to abandon their crops.



GSMA PROJECT

In March 2024, FTF received a GSMA grant to develop a USSD platform and enhance its farm engagement app to involve more farmers in the off-take of imperfect and surplus produce. Its e-commerce platform allows B2B buyers to purchase more imperfect and surplus produce from farmers. The grant also aims to support the establishment of additional supply hubs (aggregation centres for agricultural produce). This will facilitate farmers' access to Farm to Feed's digital solutions, increase their incomes and improve their resilience to climate shocks.



OUTCOMES

FTF launched its redesigned mobile app alongside a new USSD platform, enhancing the accessibility and efficiency of its food rescue services. The app is an overhaul of the previous version, offering improved functionality and user experience, while the introduction of the USSD platform will reach users without access to smartphones.

FTF secured seed funding to help scale its operations.



TRACTION

As of March 2025, 80 farmers were onboarded to the e-commerce platform.





Pricepally

COUNTRY

Nigeria

FOCUS AREAS

Agriculture
AI

TEAM

51-200



Pricepally

is an e-commerce platform connecting consumers to affordable and fresh bulk food directly from farmers and wholesalers.



PROBLEM

In Nigeria, climate change is having a detrimental impact on agricultural production, including drought, untimely rainfall, flooding of farmland, rising temperatures and increasing aridity. These changes result in reduced crop yields and lower-quality produce, leading to economic losses for farmers and food producers. Post-harvest losses compound these financial challenges, as valuable resources are wasted. Consumers are also negatively affected as food waste and lower yields result in higher food costs and limited access to affordable, nutritious options.



GSMA PROJECT

In March 2024, Pricepally received a GSMA grant to enhance its consumer and operational applications, including through gamification to increase customer engagement and improve supply chain management processes.



TRACTION

- The number of farmers registered on the portal more than doubled from 161 to 346 between June and December 2024.
- 5,154 low-income women provided with access to affordable food via transactions with Pricepally.
- More than 7,500 customers use Pricepally to buy produce and goods from the e-commerce store, including almost 5,500 women.





COUNTRY
Ghana

FOCUS AREAS
Agriculture
AI

TEAM
51-200

MNO PARTNER
MTN Ghana

Sommalife's

software links smallholder farmers and stakeholders to global markets, promoting environmental conservation and providing user-friendly tech tools for manufacturers to monitor products and impact.



PROBLEM

Desertification and climate change threaten the livelihoods of shea butter farmers, especially women.



GSMA PROJECT

In March 2024, Sommalife received a GSMA grant to enhance its proprietary software, TreeSyT, to digitalise the operations of 90,000 female smallholder farmers in northern Ghana. TreeSyT digitalises commodity buying, farmer education and tree care in areas with limited or no internet access. The grant is being used to connect smallholder farmers to international markets and train them in sustainable agriculture.



OUTCOMES

- Signed agreements with 59 communities for the conservation of parklands.
- A partnership with MTN Ghana integrates mobile money APIs in TreeSyT to facilitate payments to farmers.



TRACTION

- As of December 2024, more than 75,000 smallholder farmers use TreeSyT.
- As of December 2024, Sommalife has trained more than 9,800 female shea butter farmers and connected them to international markets for premium payments.



**COUNTRY**

Kenya

FOCUS AREASAgriculture
IoT**TEAM**

11-50

UjuziKilimo's

platform supports data-driven decisions for smallholder farmers by collecting, organising and interpreting agricultural data. The company has developed SoilPal – a device that uses IoT sensors to help farmers understand soil health.

**PROBLEM**

Climate change has intensified water scarcity, soil degradation and erosion in Africa, diminishing soil fertility and agricultural output, with 65% of the continent's farmland affected. Precision agriculture, which customises inputs like fertilisers and water to crop needs, could mitigate these issues but is largely inaccessible in Kenya due to the high costs of soil testing sensors and the distance to testing labs.

**GSMA PROJECT**

In March 2024, UjuziKilimo received a GSMA grant to implement SoilPal, a portable device equipped with sensors that can analyse 13 soil parameters in five minutes, including moisture, temperature, acidity, salinity, nutrient levels and GPS data. Farmers receive SMS advice on using carbon-negative fertilisers, water and chemicals to optimise crop yield. The grant will be used to assemble 35 SoilPal units in Kenya and aims to offer soil testing services to 50,000 farmers.

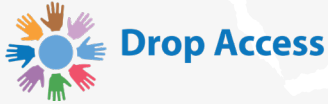
**OUTCOMES**

More than 1,400 actionable SMS recommendations have been sent to farmers farmers with important information such as the type of seeds to be planted, type and quantity of fertiliser to use and soil improvement practices.

**TRACTION**

As of March 2025, UjuziKilimo has completed more than 17,600 soil tests for smallholder farmers in Kenya, providing farmers with results on six soil health parameters.





COUNTRY

Kenya

FOCUS AREAS

Health
IoT

TEAM

11-50



PROBLEM

More than 300,000 refugees, host community members and internally displaced persons in Turkana (Kakuma and Kalobeyei), Marsabit and Isiolo have inadequate access to vaccines and medications. This problem is exacerbated by poor energy access in health facilities and climate events such as drought and flooding. Inaccurate cold chain monitoring systems lead to vaccines being wasted, under-vaccination and poor adherence to vaccination schedules.



GSMA PROJECT

In November 2024, Drop Access Limited received a GSMA grant to scale the Vaccibox solution in humanitarian settlements in Turkana County. Using a Cooling as a Service (CaaS) model, this initiative provides private and public health facilities with affordable access to reliable cold chain equipment and the Vaccibox IoT platform. This technology ensures the safe storage and transportation of vaccines and medications to remote and off-grid locations, improving adherence to vaccination schedules and digitalising immunisation records. People in these settlements will also receive automated SMS alerts, reminding them of immunisation appointments and where to access these services.

Drop Access Limited

is a Kenyan social enterprise that offers affordable, practical and reliable cold chain solutions to rural, off-grid and underserved communities.



**COUNTRY**

Zambia

FOCUS AREAS

Mobility

IoT

TEAM

11-50

**E-Ride**

is developing affordable, electric, productive use batteries and motorbikes suitable for the road conditions of developing countries. Its flagship product, a lithium battery, can be removed from the motorbike to be charged by solar panels or the electric grid.

**PROBLEM**

E-Ride is addressing the lack of affordable transport for people and goods within the Meheba Refugee Camp – Zambia's largest refugee settlement.

According to a 2022 UNHCR report, more than 35,000 people live in Meheba Camp. Although the camp has been operating for about 50 years, there is still no means of affordable transport for people or goods. Expensive fuel has also increased transport costs, which severely affects economic, social and healthcare activities. In addition, due to the lack of electricity in the refugee camp, inhabitants use diesel generators to power their homes and businesses.

**GSMA PROJECT**

In November 2024, E-Ride received a GSMA grant to train a local team of refugees to assemble, operate and maintain a fleet of IoT-connected electric motorcycles. The motorcycles will be sold to refugees on a rent-to-own basis to enable the drivers to earn a better income and offer affordable transport services to the inhabitants of the camp. Motorcycle usage and battery health are monitored in real time through a GSM-based data transmission system operating on Airtel Zambia's network.

This project is in partnership with UNHCR.





COUNTRY

Rwanda



FOCUS AREAS

Fintech

AI

TEAM

2-10

Exuus

offers savings and financial services infrastructure for unbanked people in Sub-Saharan Africa.



PROBLEM

Informal saving groups in Rwanda's refugee camps lack effective credit assessment tools, limiting borrowers' access to loans, impeding economic growth and contributing to financial instability.



GSMA PROJECT

In November 2024, Exuus received a GSMA grant to roll out a microloan product under the SAVE Score project. Powered by machine learning, the product will use alternative data to generate credit scores for unbanked refugees in informal saving groups through fintechs or formal financial service providers. The microloan product aims to overcome barriers to credit, improve credit access for refugees, enhance their livelihood opportunities, empower them financially and promote long-term resilience. Exuus plans to digitalise the financial records and transactions of 1,760 members of informal savings groups in five Rwandan refugee camps.





COUNTRY

Nigeria

FOCUS AREA

Health

TEAM

51-200



Helium Health

improves global health efficiencies and outcomes using data and technology.



PROBLEM

During natural disasters such as floods, people in Delta State and Bayelsa State in Nigeria cannot travel to health clinics to receive the healthcare services they need. The 2022 floods damaged more than 22.9% of health facilities, highlighting the dire need for more resilient healthcare systems and continuity of care. It is therefore critical that during disasters such as floods, vulnerable community members have access to timely medical advice, diagnoses and prescriptions without the need for travel, which is often impossible during floods.



GSMA PROJECT

In November 2024, Helium Health received a GSMA grant to enhance the HeliumDoc platform by integrating it with geospatial mapping, USSD functionality and robocall alerts. The HeliumDoc platform provides remote consultations and secure access to health records in Nigeria's flood-prone regions.





COUNTRY
Uganda

FOCUS AREA
Financial inclusion

TEAM
11-50



Patapia

empowers refugee women and girls to become economically independent, strong and self-determined leaders of change.



PROBLEM

Access to livelihood opportunities and financial services is a challenge for the more than 1.6 million refugees living in Uganda, who cannot access loans due to high interest rates, lack of assets for collateral and lack of credit history. This makes it difficult for refugees to access the capital they need to start and grow a business. Low financial literacy and a lack of business planning skills and support compound these challenges, making self-sufficiency and integration in the local economy even harder.



GSMA PROJECT

In November 2024, Patapia received a GSMA grant to expand its operations and provide microloans to refugees living in Rwamwanja and Kyaka II refugee settlements in Uganda. The funding will also be used to provide capacity building for refugees on business planning and financial literacy. Patapia will also redesign the USSD interface of its digital banking solution to make it available in Swahili, for ease of use by refugees.



**COUNTRY**

Somalia

FOCUS AREA

Early warning systems

TEAM

11-50

Raagsan

is a female-led social enterprise that works in fragile and conflict-affected countries to develop and strengthen policies and systems that enhance public service delivery.

**PROBLEM**

There are recurrent natural disasters, such as floods and droughts, that plague communities in the Beledweyne District, Somalia, threatening their lives and livelihoods. The absence of effective public warnings, alerts and guidance on disasters, mechanisms to engage with the public and inadequate hydrological data all hinder residents from being notified about the risks and how to respond.

**GSMA PROJECT**

In February 2025, Raagsan received a GSMA grant to empower Beledweyne communities with tailored, near real-time water and climate-risk information through an innovative mobile citizen engagement platform, the Daadihiye Citizen Engagement Platform. Raagsan will train primary data providers and guide government leaders in digitalising their manual river and rainfall measurements through SMS/WhatsApp. The data collected will be integrated with existing hydrometeorological data from NASA's surface water and ocean topography (SWOT) data. Warnings and guidance will be relayed to communities using the Daadihiye platforms (SMS, radio and community workshops).



COUNTRY
Jordan

FOCUS AREAS
Water
IoT
AI

TEAM
2-10

MNO PARTNER
Orange

SmartWTI

provides and delivers smart and innovative technology solutions.



PROBLEM

SmartWTI is addressing the severe water crisis in Jordan's northern governorates, which has been exacerbated by the Syrian refugee crisis. With a chronic water deficit of 30%, and 40% increased demand due to the influx of refugees to the area, the challenge is acute and affects both host communities and the 661,670 Syrian refugees, who now account for 20% of Jordan's population. Higher demand for water has put a strain on water infrastructure, and a lack of data on wasted water, poor collaboration and insufficient incentives for maintenance have exacerbated the problem.



GSMA PROJECT

In November 2024, SmartWTI received a GSMA grant to introduce Blue Future for Schools – a water management solution that revolutionises water management in Jordan's refugee-hosting communities by using AI and IoT technology to monitor and control water usage in real time.

SmartWTI aims to install this water management solution in up to 40 schools in the refugee-hosting communities of Jordan. This will enable these schools to monitor their water consumption, take immediate action if a potential leak is detected and avoid the misuse and loss of water.



IMPACT PORTFOLIO

Asia

2020 - 2024

30
organisations

09
countries

05
women-led
organisations

16 MNO partnerships



GSMA



Digital inclusion



Assistive technology



Digital urban services



Climate resilience and adaptation



Anticipatory humanitarian action



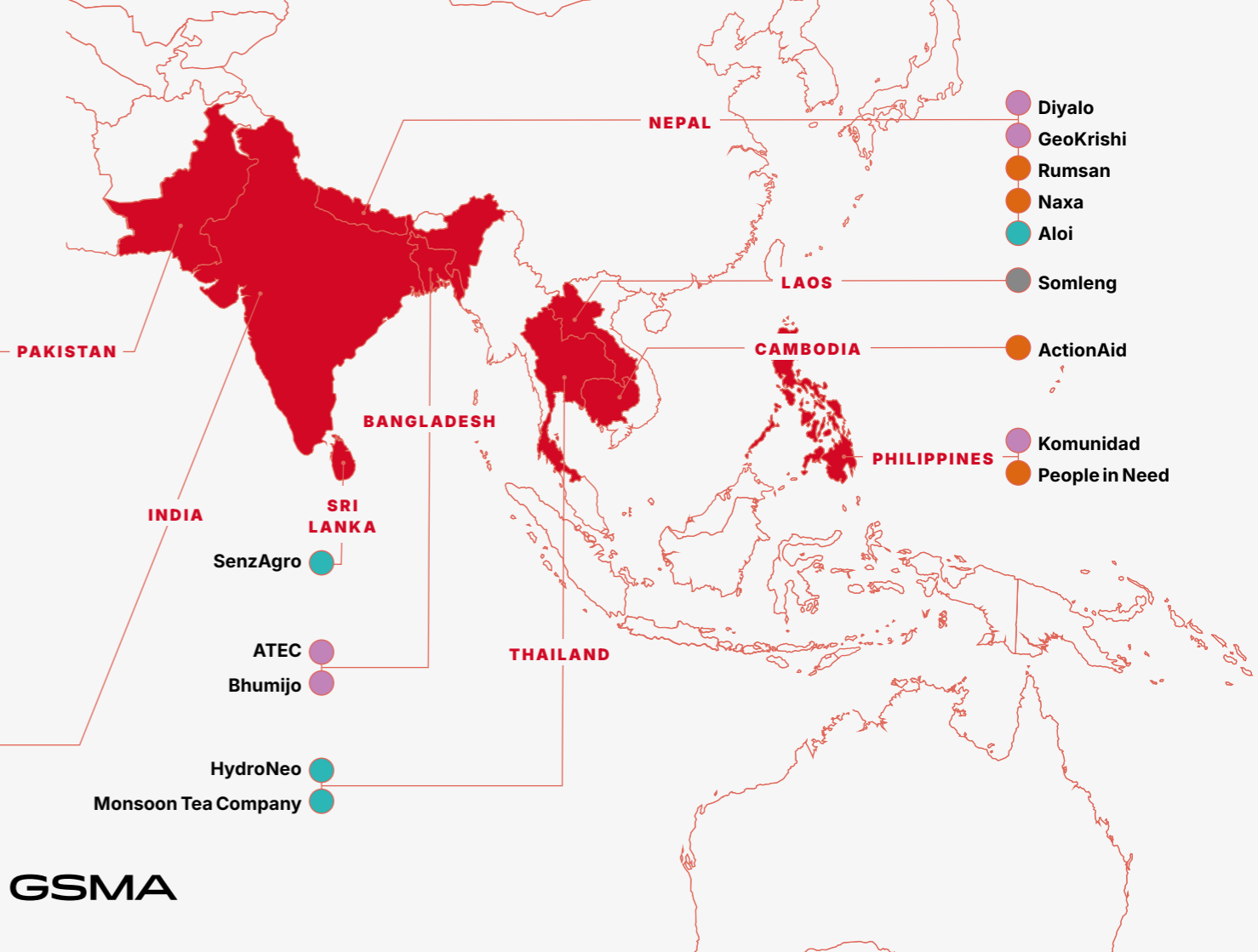
Climate resilience and adaptation 2.0



Humanitarian challenges

- Knowledge Platform ●
- Orenda ●
- Vceela ●
- DeafTawk ●
- BaKhabar Kissan ●
- Buraq ●
- Crop2X ●
- Company of Innovative Solutions (CIS) ●
- ConnectHear ●
- Viamo Pakistan ●

- Navana Tech ●
- I-Stem ●
- SignAble ●
- JanaJal ●
- ReCircle ●
- InQube ●



GSMA



knowledge platform

COUNTRY
Pakistan

FOCUS AREA
Education

TEAM
51-200

MNO PARTNER
Jazz Pakistan



Knowledge Platform's

Learn Smart Pakistan is a gamified cloud learning platform for students.



PROBLEM

In Pakistan, quality education is only affordable for middle- and upper-income groups and, as a result, millions of students are out of school. While online learning resources are available, most people in Pakistan cannot afford to buy a smartphone, tablet or internet connection for online education.



GSMA PROJECT

In March 2021, Knowledge Platform received a GSMA grant to roll out mobile educational devices through microfinancing, introducing one educational device per family. Knowledge Platform provides access to quality education through a bundled learning app, addressing the affordability barrier by offering a smartphone or tablet financing scheme to underserved communities and enabling users to pay in instalments. Through a partnership with Jazz Pakistan, mobile internet is provided to Knowledge Platform users at a subsidised rate.



OUTCOMES

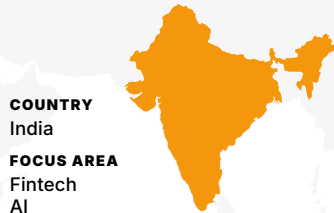
In November 2024, Knowledge Platform merged with GSMA alumnus Eneza Education, and this merger now serves more than 1 million learners in Africa and Asia using mobile, web and SMS technologies.



TRACTION

As of February 2025, nearly 52,000 students use the mobile app, just over 21,500 of whom are women.





COUNTRY
India

FOCUS AREA
Fintech
AI

TEAM
11-50

Navana Tech

builds text-free, image-based, voice-assisted technology for low-literate smartphone users.



PROBLEM

Smartphone apps are text-dependent, primarily in English, resulting in accessibility and usability challenges for low-literate, vernacular speaking internet users. Challenges are amplified in apps where money is involved, such as e-commerce and financial services. Because of this, there is a noticeable difference in app drop-off and user retention rates between urban and rural users.



GSMA PROJECT

In March 2021, Navana Tech received a GSMA grant to develop a conversational voicebot in multiple Indian languages (Hindi, Telugu, Tamil, Marathi, Kannada) and launch financial services and e-commerce use cases. Its conversational AI voicebot enables digital actions through two-way conversations.



OUTCOMES

Launch of a generative AI voicebot available in 11 of the 22 official languages in India that enables users who are not digitally literate and who do not speak English to access services.





COUNTRY
Pakistan

FOCUS AREAS
Education
AI

TEAM
51-200

MNO PARTNER
Telenor Pakistan



Orenda

bridges the digital divide between private and public schools in Pakistan by providing engaging, high-quality digital education.



PROBLEM

In Pakistan, 22.3 million children are out of school, and enrolment and performance both decline as children move from primary to secondary grades.



GSMA PROJECT

In March 2021, Orenda received a GSMA grant to expand its curriculum and reach by developing its Taleemabad app for KaiOS phones, thus tackling affordability and accessibility barriers. Orenda also launched its B2B solution for low-cost schools by developing an enterprise resource planning (ERP) system to further improve accessibility.

In April 2024, Orenda received an additional GSMA grant through the Accelerated Growth Fund to use AI for personalised learning and integrating users on a unified platform.



OUTCOMES

As of March 2025, Orenda has received follow-on funding to help digitalise its curriculum and scale its solution.



TRACTION

As of March 2025, the AI-generated curriculum has been used by approximately 141,000 students, 5,700 teachers and nearly 19,000 parents.





VCEELA

COUNTRY

Pakistan

FOCUS AREA

Fintech

TEAM

11-50

MNO PARTNERS

Jazz, Telenor

**Vceela**

is a digital ecosystem for Pakistani artisans that connects them directly to local and international markets.

**PROBLEM**

The artisan sector accounts for 15% of Pakistan's workforce – the second largest employer in the country. More than 85% of artisans are not connected digitally, which makes them more vulnerable to exploitation from intermediaries.

**GSMA PROJECT**

In March 2021, Vceela received a GSMA grant to scale its existing solution to reach more artisans, who were trained to use mobile services. Through Vceela's mobile solution, artisans can source raw materials, market and sell their products, collect payments and receive microfinance more easily. The project has a particular focus on disadvantaged groups, including women and persons with disabilities.

**OUTCOMES**

Trained just over 5,000 artisans to manage their product profile on the Vceela platform.

**TRACTION**

As of February 2025, Vceela has just over 75,000 artisans on its web platform and mobile app, including more than 61,500 women.



Deaf Tawk

Bridge the gap!

COUNTRY
Pakistan

FOCUS AREAS
Assistivetech
AI

TEAM
11-50

MNO PARTNER
Jazz, Telenor,
Dialog Axiata



DeafTawk

provides real-time, on-demand access to sign language interpretation services.



PROBLEM

There are more than 10 million people in the deaf community in Pakistan, and they face communication barriers due to limited access to sign language interpreters.



GSMA PROJECT

In July 2021, DeafTawk received a GSMA grant to provide the deaf community with access to quality sign language interpretation services through digital technology. This involves a video relay solution for one-on-one interpretation, group calling and human-less interpretation through AI and machine learning.



OUTCOMES

Raised follow-on funding, some of which was used to support growth in Puerto Rico, Sri Lanka and Denmark.



TRACTION

- As of February 2025, DeafTawk has just over 2,400 sign language interpreters, nearly 2,000 of whom are women.
- Just over 12,900 B2B customers have used the service, as well as 208,800 B2C customers.





I-Stem



COUNTRY
India

FOCUS AREAS
Assistivetech
AI

TEAM
11-50

MNO PARTNER
Dialog Axiata

I-Stem

offers AI-enabled digital services to provide high-quality accessible documents for people with disabilities.



PROBLEM

Most people with visual impairments, especially students and employees, face challenges with inaccessible documents, media and apps. Lack of awareness of assistive technologies and lack of access to digital information limit access to opportunities and impede the growth of persons with visual and hearing impairments.



GSMA PROJECT

In July 2021, I-Stem received a GSMA grant to convert the I-Stem web portal into a mobile app that leverages AI to provide document and audio-visual accessibility services, helping users with visual and hearing impairments.

In April 2024, I-Stem received an additional GSMA grant through the Accelerated Growth Fund to provide a voice-powered interface in local languages to help people access digital resources and complete tasks that are otherwise inaccessible through the internet or mobile apps. These services are provided through WhatsApp and IVR, enabling I-Stem to serve a broad user base, including individuals in semi-urban and rural areas.



OUTCOMES

Received a grant in February 2025 from Meta and The Nudge Institute to scale its current AI solution and pilot a new solution.



TRACTION

I-Stem has just over 31,000 users on its mobile app, providing access to document, audio, video and app accessibility services. Nearly 9,000 of these users are women.



**COUNTRY**

India

FOCUS AREA

Assistivetech

TEAM

51-200

**SignAble**

provides real-time, on-demand access to sign language interpretation services.

**PROBLEM**

People in the deaf community face social isolation, and most are illiterate with little access to education and employment. To facilitate communication for the deaf community, SignAble's app offers a mobile interpretation service in Indian Sign Language, enabling users to communicate with anyone, anywhere, anytime.

**GSMA PROJECT**

In July 2021, SignAble received a GSMA grant to implement a two-way calling app, optimise the interface to improve the user experience, optimise video streaming for low-bandwidth settings and test and validate an affordable pricing model.

**OUTCOMES**

Funding was received from the Prosus Social Impact Challenge for Accessibility (SICA) for startups developing assistive technology to aid persons with disabilities.

**TRACTION**

More than 29,500 individuals are on the app, 14% of whom are women.



COUNTRY
Bangladesh

FOCUS AREA
Energy
IoT

TEAM
51-200

ATEC

provides PAYG cook stoves for customers at the bottom of the pyramid, with GSM tracking of climate impact.



PROBLEM

In Bangladesh, 65% of households still use biomass for cooking. The emissions and smoke inhalation resulting from dirty cooking methods cause multiple health issues, particularly for women. For households earning less than \$10 a day, 1.5 days a month are spent collecting wood, while up to three hours a day are spent on household chores due to inefficient cooking.



GSMA PROJECT

In March 2022, ATEC received a GSMA grant to develop an Android mobile app integrated with its eCook stoves, an electromagnetic induction stove that provides clean cooking, available on a PAYG basis. The app shows users real-time electricity usage data, payment status and any carbon offset data, enabling them to pay as little as \$5 a month. The stove automatically mints Gold Standard-certified carbon credits. These credits can be sold to ATEC's international corporate partners and on carbon markets. The benefits from the sale of carbon credits are shared with users through subsidised monthly instalments.



OUTCOMES

Received follow-on funding from a variety of funders for research and development, to secure partnerships and to enable carbon credit trading.



TRACTION

There are just over 4,000 users of ATEC's gamification programme, including just over 3,400 women.





COUNTRY
Bangladesh

FOCUS AREA
Sanitation

TEAM
51-200

Bhumijo

provides hygienic and affordable smart toilets in low-income areas by either building new toilets or renovating and managing existing facilities.



PROBLEM

For the more than 5 million people who commute daily on the roads of Dhaka, there are fewer than 50 usable public toilets. The detrimental effects are felt disproportionately by low-income communities and women, who often spend 12 to 16 hours a day outside their homes.



GSMA PROJECT

In March 2022, Bhumijo received a GSMA grant to digitalise the operation of its public toilets. With the grant, Bhumijo trialled a suite of technologies, including a touchless entry system, and integration of an Android mobile app for users to pay for a subscription and receive information on hygiene. These services are available through a subscription or pay-per-use model. Bhumijo's centres have a separate area for women, ensuring their privacy and safety.



OUTCOMES

Received a grant from the VITOL Foundation and additional follow-on grant funding for business expansion.



TRACTION

- There were more than 3.35 million walk-in users as of March 2025, just over 390,000 of whom were women.
- There are just over 4,000 subscribers to Bhumijo's digitalised toilets.



COUNTRY

Nepal



FOCUS AREAS

Water
Energy
IoT

TEAM

51-200

MNO PARTNER

Nepal Telecom

Diyalo

specialises in automated, IoT-enabled water production systems, offering real-time water quality monitoring and a simplified water intelligence system.



PROBLEM

Only 52% of Nepalis have access to piped water for their homes and fewer than 30% of Nepal's 44,000 water schemes are fully functional. Issues such as water overflow, excessive energy use, unnecessary labour costs and challenges in managing water distribution schedules are having an adverse impact on the efficiency of water distribution and affecting the delivery of quality water services. Where services fail, people often rely on tanker truck water. This water is usually lower quality and can cost up to 40 times more than piped water, with price gouging in times of scarcity well documented.



GSMA PROJECT

In March 2022, Diyalo received a GSMA grant to develop its offering through a mobile app and enterprise dashboard for urban utility providers. This enabled the company to deploy IoT to measure network performance and leakages, water pump automation and update the ERP and CRM systems for utility providers and a mobile app for end users. The water intelligence system enables informed, transparent and swift decision-making, particularly on company operations, collection, receivables and meter reading.



OUTCOMES

Provided 52 B2B water utility companies with an IoT-enabled water intelligence system.



TRACTION

Just over 22,950 B2C users are registered on the app, including just over 9,000 women.





COUNTRY
India

FOCUS AREAS
Water
IoT

TEAM
51-200

MNO PARTNERS
JIO, Airtel

JanaJal

Water on Wheels (JJWOW) provides mobile water ATMs for middle- and low-income groups, as well as small vendors, food carts, shops and business owners.



PROBLEM

In Delhi, 1.8 million people live in 800 slums without a secured, piped water connection. Despite demand and willingness to pay for safe water, they must buy water from unreliable sources that lack quality assurance and are unable to reach many areas. These sources are often considerably more expensive than water provided by the utility.



GSMA PROJECT

In March 2022, JanaJal received a GSMA grant to trial and launch 25 of its Water on Wheels (WOW) vehicles. Each JJWOW is IoT-enabled and distributes up to 3,000 litres of water per day. It offers real-time monitoring of water quality, customer orders and even monitors the qualitative and quantitative aspects of water dispensed, remotely supported by its proprietary tech platform JJSUITE.



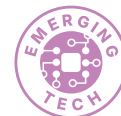
OUTCOMES

More than 300 WOWs are operating as of April 2025.



TRACTION

- As of March 2025, more than 17,000 users have made at least one transaction, just over 5,000 of whom are women.





COUNTRY

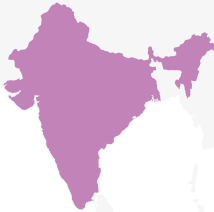
India

FOCUS AREA

Sanitation

TEAM

11-50



ReCircle's

digital platform aggregates the collection and processing of dry waste, which can be sold as plastic credits to businesses.



PROBLEM

Low-value, non-recyclable plastics, such as food packets and wrappers, are usually dumped in landfills as there is no value attached to collecting this waste. Companies producing plastic waste do not have a proper channel to recover their waste to meet their sustainability commitments and comply with local guidelines, leaving waste to be discharged into the environment.



GSMA PROJECT

In March 2022, ReCircle received a GSMA grant to digitalise its existing dry waste supply chain from collection to processing. This made it more transparent and improved operational efficiencies in waste management. The ReCircle platform brings together individual household waste collectors, large-scale waste aggregators, recyclers and processors.



OUTCOMES

Received follow-on funding from Flipkart Ventures, 3i Partners, Acumen, DBS Foundation and others to upgrade its ClimaOne platform.



TRACTION

ReCircle pivoted its business model and had just over 200 direct users, an almost 100% increase from the year before.



**COUNTRY**

Pakistan

FOCUS AREASAgriculture
AI**TEAM**

51-200

MNO PARTNERS

Zong Mobile

**BaKhabar Kissan**

(BKK) runs a network of weather stations providing hyperlocal weather information, enabling access to agricultural expertise through digital platforms.

**PROBLEM**

There are 8.2 million smallholder farmers in Pakistan working to meet the basic food and nutrition requirements of the country's population. However, a lack of high-quality data hinders food security due to inefficient decision-making and disaster management. The lack of weather data stations in Pakistan leaves poor communities, particularly farmers, even more vulnerable to the effects of climate change.

**GSMA PROJECT**

In March 2022, BKK received a GSMA grant to enhance its digital weather platform and provide farmers with real-time, hyperlocal weather information. The grant was used to disseminate content related to agriculture and livestock practices to enhance the resilience of farmers to climate change-induced weather impacts. Its platform also provides access to agriculture and weather experts who can help farmers learn and adapt to new farming techniques.

**OUTCOMES**

- Deployed 155 weather stations and developed additional digital channels, such as a mobile app, to provide farmers with accurate, hyperlocal weather information.
- Raised funding from Mari Petroleum in Pakistan to provide weather and agri-advisory services to farmers close to oil and gas fields in Sindh, KPK and Baluchistan provinces.

**TRACTION**

- By March 2025, nearly 12 million farmers were using the IVR, SMS and call centre.
- There are just over 216,000 users of the mobile app, more than 6,500 of whom are women.

To find out more, read the BKK [case study](#).





COUNTRY
Philippines

FOCUS AREA
Early warning systems
AI

TEAM
11-50

MNO PARTNER
Globe

Komunidad

uses SaaS solutions and AI-powered mobile apps to improve disaster response.



PROBLEM

Ranked first in the World Risk Index, the Philippines is significantly affected by extreme weather events, with an average of 20 tropical cyclones in the country each year.



GSMA PROJECT

In November 2022, Komunidad received a GSMA grant to leverage a data-driven approach to integrate environmental intelligence, early warning systems and mobile dissemination. The GSMA grant was also used to empower local government and vulnerable communities in Siargao Island that were devastated by Typhoon Rai, rapidly scaling the solution from municipalities to provinces.



OUTCOMES

Scaled the GSMA-funded pilot in Siargao into a national use case. Komunidad is currently serving 129 enterprises and government partners across industries.



TRACTION

- Komunidad had 248 registered municipality workers using its app by March 2025, 123 of whom are women.
- Launched the AI-powered safety app, Curbeet

To find out more, read the [Komunidad case study](#).



**COUNTRY**

Nepal

**FOCUS AREA**

Fintech

TEAM

11-50

GeoKrishi

helps smallholder farmers adapt to climate stressors and adopt climate-smart agricultural practices through digital learning content and advisory services.

**PROBLEM**

Without technical understanding or advice, smallholder farmers in Nepal are unable to respond to the risks of climate change. Extension services, input suppliers, tools and technologies are often inefficient and not tailored to the changing climate.

**GSMA PROJECT**

In March 2022, GeoKrishi received a GSMA grant to upgrade its existing system reach more smallholder farmers with its bundled smart agricultural solutions. The GSMA grant was also used to build a sustainable public-private-community business model by engaging closely with local government, local service providers and farmer cooperatives.

**OUTCOMES**

GeoKrishi has expanded the scope of its services to facilitate microloans, access to agricultural inputs and connect farmers with relevant markets.

**TRACTION**

As of March 2025, GeoKrishi has more than 203,000 direct users, just over 54% of whom are women.

To find out more, read the [GeoKrishi case study](#).



COUNTRY
Cambodia



FOCUS AREA
Early warning systems

TEAM
1-10

ActionAid

works to strengthen the capacity and agency of people living in poverty, their communities, organisations and movements.



PROBLEM

Cambodia faces significant challenges from climate change, with frequent flooding and droughts given the country's high vulnerability to disaster and low adaptive capacity, which are worsened by inadequate infrastructure and services.



GSMA PROJECT

In November 2023, ActionAid Cambodia received a GSMA grant to enhance its 1294 EWS solution by expanding its reach to more climate-affected provinces, focusing on drought and increasing user awareness and accessibility through voice messages for those who cannot read. This project strengthens the coordination and capacity of government ministries to provide better disaster preparedness and response, while also adding a feature to the 1294 service for reporting loss and damage that aids local teams in rapid disaster assessments.



OUTCOMES

More than 830,000 people across 11 provinces were reached through radio, social media and local engagement campaigns.



TRACTION

- As of March 2025, there were just over 208,000 users
- The existing EWS was enhanced by installing 12 new real-time groundwater-level sensors and upgrading 20 in 11 provinces.





COUNTRY
Pakistan

FOCUS AREAS
Early warning systems
IoT

TEAM
11-50



Buraq Integrated Solutions

is a system integration and professional service provider that works in environmental monitoring, automatic weather stations, and early warning systems.



PROBLEM

Vulnerable communities in Gilgit-Baltistan and Chitral, Pakistan, are at high risk due to their location and multiple hazards like floods and an alarming 400-fold increase in snow avalanches in the past decade. These risks are compounded by geographic isolation, poor internet connectivity and minimal government services. The lack of a unified communication system significantly hampers the ability of disaster response agencies to effectively monitor, generate and disseminate warning messages to these communities.



GSMA PROJECT

In November 2023, Buraq received a GSMA grant to modernise disaster warning systems in Pakistan by integrating multi-platform data into a single, user-friendly mobile and web-based communication tool, enhancing the functionality of existing automatic weather stations and introducing IoT-enabled landslide warning systems. This upgrade also includes improving weather monitoring equipment for automatic data transmission and revamping the web portal and mobile app to ensure effective dissemination of early warnings to communities.



OUTCOMES

Buraq installed 12 new weather monitoring stations in areas highly vulnerable to seasonal natural disasters. These installations were strategically placed in regions prone to off-season flooding and peak-season snow avalanches.



TRACTION

As of March 2025, 570 users were onboarded and tested the early warning system.





COUNTRY
Philippines

FOCUS AREAS
Early warning systems
IoT

TEAM
11-50

MNO PARTNERS
SMART



People in Need

(PIN) provides humanitarian aid and helps people overcome disaster and support them in recovery so that they can get back on their feet.



PROBLEM

The Philippines lacks mobile-enabled technology that can generate real-time hazard information and localised forecasts, along with an end-to-end alert dissemination system at the local level.



GSMA PROJECT

In November 2023, PIN received a GSMA grant to improve disaster response by generating risk data and real-time hazard information using IoT-connected early warning instruments, and by developing alert dissemination models that use mobile technology to send timely SMS and social media alerts. This initiative also includes raising community awareness through campaigns and enhancing local preparedness with contingency planning, assessments and simulation exercises.



OUTCOMES

As of March 2025, 14 flood sensors have been installed on bridges in 12 municipalities.



TRACTION

As of March 2025, there are more than 55,000 direct users across Caraga, BARMM, Misamis Occidental and Zamboanga del Sur in the Philippines, helping communities to stay informed and prepared.





COUNTRY
Nepal

FOCUS AREAS
Fintech
Blockchain

TEAM
11-50

Rumsan's

decentralised platform Rahat provides immediate access to finance with transparent and inclusive aid distribution and builds resilience through microinsurance for smallholder farmers.



PROBLEM

In Nepal, 15.1% of the population live in extreme poverty and are highly susceptible to disasters. Response and recovery mechanisms are slow, taking months to actualise and increasing the risk of these individuals being trapped in a cycle of poverty.



GSMA PROJECT

In November 2023, Rumsan received a GSMA grant to enhance the Rahat platform with a blockchain-powered module for faster humanitarian response, focusing on providing early warnings and pre-disaster cash access to more than 5,000 vulnerable individuals in Nepal's flood-prone Terai region. This upgrade uses smart contracts to automatically dispatch voice and SMS warnings and transfer tokens directly to beneficiaries, significantly speeding up the process and management of disaster aid.



OUTCOMES

In December 2024, Rumsan raised funding from the Stellar Foundation to integrate Rahat in the Stellar ecosystem for their cash distribution system with smart contracts and an early warning system.



TRACTION

- As of December 2024, Rumsan had more than 5,300 direct users.
- The Rahat project has provided early warning communication to more than 20,000 vulnerable individuals.
- Distributed NRs 11.61 million to 774 climate-affected individuals, improving their financial resilience.
- Sent more than 27,000 real-time early warning notifications on financial aid and disaster preparedness, enhancing outreach and response.





COUNTRY
Nepal

FOCUS AREA
Early warning systems

TEAM
51-200



NAXA

is a geospatial technology company that develops digital and spatial technologies to address contemporary challenges.



PROBLEM

In low-income countries like Nepal, the absence of data-driven disaster preparedness and recovery programmes has a significant impact on vulnerable communities, leading to loss of life, displacement and economic ruin, intensified by inadequate risk communication.



GSMA PROJECT

In November 2023, Naxa received a GSMA grant to create Household Level Disaster Risk Management Plans (HDRMP) for 10,000 households, assessing individual flood risks and developing specific flood risks and developing specific thresholds and triggers for various hazard scenarios while considering climate change impacts. This initiative integrates risk and weather data to deliver customised early warnings and actions, timely access to forecasts and near real-time observations and implementing targeted cash voucher assistance (CVA) programmes.



OUTCOMES

- Raised funding from the Asian Disaster Preparedness Centre as part of its iCARE Innovations Fund, which focuses on climate adaptation and resilience projects.
- Raised funding from Twilio to upgrade its platform to enhance features and usability, design and implement youth-led data collection initiatives and scale its operations to flood-prone areas of Nepal and the Democratic Republic of the Congo (DRC).



TRACTION

As of March 2025, Naxa has provided just over 16,000 households with personalised risk assessments and disaster management plans, ensuring better preparedness for floods.



**COUNTRY**

Nepal

FOCUS AREA

Agriculture

TEAM

11-50

**Aloi**

helps informal entrepreneurs access business finance, with a focus on green sectors. Aloi's technology increases the trust of lenders to lend to micro-entrepreneurs through automatic loan monitoring and the use of alternative credit data.

**PROBLEM**

In Nepal, smallholder dairy farmers rely on rainfall for livestock feed, but changing patterns due to global warming have decreased forage and milk production. The sector struggles with finance to expand fodder production, adopt alternative energy like biogas, buy insurance and upgrade refrigeration. These micro-entrepreneurs in the informal sector find it hard to secure loans due to no credit history, proof of income or collateral, which limit their ability to adapt to climate change with technology.

**GSMA PROJECT**

In March 2024, Aloi received a GSMA grant to support dairy farmers through training and loans to implement climate-smart practices like agro-forestry for fodder, biogas from manure, water conservation and solar-powered cooling. Aloi creates digital credit profiles for farmers, enabling digital loan disbursement through a monitored vendor ecosystem linked to financial institutions. Additionally, Aloi digitalises payments from milk traders to farmers to monitor income and loan repayments.

**OUTCOMES**

A partnership with Laxmi Sunrise Bank in June 2024 aims to strengthen the bank's portfolio in the SME and MSME sectors, leveraging leads generated by Aloi to drive growth.

**TRACTION**

Aloi has more than tripled the number of users (dairy farmers with credit profiles) from 210 in June 2024 to 755 as of March 2025, including 111 women.



COUNTRY

Pakistan

FOCUS AREAS

Agriculture
IoT
AI

TEAM

11-50

MNO PARTNER

Telenor Pakistan



Crop2X

uses IoT sensors and satellite imagery to provide farmers with real-time data and actionable insights.



PROBLEM

In Pakistan, agriculture dominates water use, consuming more than 90% of the country's water resources, while 'water is already scarce. Climate change could worsen this situation. The misuse of fertilisers adversely affects soil health, leading to issues like altered pH levels, increased pest activity, soil acidification and crust formation, alongside diminishing soil organic carbon, beneficial organisms, plant growth and yield, while also boosting greenhouse gas emissions. Many Pakistani farmers stick to traditional farming methods, which limits yield potential and, without data-driven insights, results in the overuse of resources.



GSMA PROJECT

In March 2024, Crop2X received a GSMA grant to provide farmers with real-time information on crop conditions, water levels, nutrient levels, fertiliser needs, yield predictions and crop classification through mobile and web-based applications. This empowers farmers to make informed, data-driven decisions and implement precise farming practices tailored to their soil and crop requirements. This helps to increase productivity and create a more sustainable agricultural system.



OUTCOMES

Crop2X launched an AI-powered crop classification and yield prediction solution and partnered with Telenor Pakistan in October 2024 to integrate its solution on the My Telenor App (MTA) and mAgri Platform.



TRACTION

Crop2X onboarded 268 farmers to its platform by March 2025, who use the soil probe and satellite-based GIS imagery service.





COUNTRY
Thailand

FOCUS AREAS
Aquaculture
IoT
AI

TEAM
11-50

HydroNeo's

Smart Farm system makes shrimp farming more efficient through automated farm monitoring, weather warnings and disease detection.



PROBLEM

Thailand's shrimp production has declined from 600,000 metric tonnes in 2011 to 270,000 in 2022, with the number of farmers dropping from 25,000 to approximately 7,000. This stems from a lack of knowledge and technological intervention, influenced by stigma and pride. Climate change shocks, such as heat waves, diseases and algae blooms, make this challenge even more complex.



GSMA PROJECT

In March 2024, HydroNeo received a GSMA grant to create the HydroNeo Digital Farm app, accessible to all Thai shrimp farmers through the Android Play store. It offers free basic features and affordable in-app purchases, supporting smart farming to mitigate climate change risks. The app includes six main functions: regional climate data, disease reporting, smartphone-based shrimp analytics, market price index, financials overview and market demand.



OUTCOMES

HydroNeo established a knowledge-sharing farmer community that shares knowledge about diseases and experiences with shrimp production.



TRACTION

HydroNeo increased the number of shrimp and fish farmer users from 0 in March 2024 to 593 in December 2024, 125 of whom were women.





COUNTRY
India

FOCUS AREAS
Agriculture
IoT

TEAM
11-50

InQube's

B2B SaaS platform enhances food security, promotes sustainable farming and establishes connections between farmers and stakeholders in the agricultural value chain.



PROBLEM

The Sundarbans mangrove region in West Bengal, India, faces severe ecological threats from climate change and erosion. Nine of the 14 deadliest tropical cyclones globally have struck the Bay of Bengal, endangering the livelihoods of small and marginal farmers in this area.



GSMA PROJECT

In March 2024, InQube received a GSMA grant to develop GreenQube, an SaaS platform that uses IoT sensors and digital payments to connect farmers via last-mile aggregators. It addresses changing pest and disease patterns by promoting sustainable and regenerative farming practices, including composting, crop diversity and organic methods. The platform supports a carbon-offset project for mangrove reforestation, offering digital tracking and boosting financial support for farmers by 2027.



OUTCOMES

- Partnered with Makaibari Tea, which will use InQube's traceability platform.
- Conducted 34 farmer workshops on mangrove plantation and growth tracking.



TRACTION

There are just over 15,500 users as of March 2025, including 7,300 women.





COUNTRY
Thailand

FOCUS AREAS
Agriculture
IoT
AI

TEAM
11-50

Monsoon Tea Company

cultivates tea in the forests of Northern Thailand to prevent deforestation, preserve biodiversity and support local communities. They produce unique blends while promoting sustainability and social impact.



PROBLEM

More than 20% of Northern Thailand's forest cover was lost between 1973 and 2020 due to logging and cash crop expansion, leading to biodiversity loss and more severe climate change impacts. Deforestation has made it increasingly difficult for minority upland communities to maintain their traditional livelihoods.



GSMA PROJECT

In March 2024, Monsoon Tea Company received a GSMA grant to create a traceability app for forest-grown tea from the Thai mountains. The app rewards farmers for biodiversity services and informs tea buyers about the positive impact of the tea on forest biodiversity.



TRACTION

- The number of users increased from 0 in June 2024 to 148 in March 2025.
- 94 farmers grew tea according to the principles of Forest Friendly Farming, including 53 female farmers.





COUNTRY

Sri Lanka

FOCUS AREA

Agriculture

TEAM

11-50

SenzAgro

is transforming Sri Lankan agriculture with precision technology that increases yields and conserves resources. Its solutions help farmers produce sustainably and efficiently.



PROBLEM

Farmers in northern Sri Lanka are grappling with the impacts of climate change like extended droughts and rising temperatures, which are compounded by improper farming practices such as overuse of chemicals, overwatering and the planting of inappropriate crops. These practices have led to a 30% drop in crop yields. Additionally, poor market access and the role of intermediaries in the supply chain inflate costs, diminish returns for farmers and hinder effective supply-demand matching, resulting in high production costs and productivity challenges.



GSMA PROJECT

In March 2024, Senzagro received a GSMA grant to develop its Digital Agriculture Value Chain platform, which promotes regenerative farming by providing farmers with current weather data and soil health insights, supporting sustainable yields and better stakeholder engagement. This platform expands on its Agricore marketplace, which serves more than 10,000 farmers and 200 agribusinesses. The initiative integrates 500 young farmers from 20 clusters in five northern Sri Lankan districts and 200 MSMEs, including buyers and service providers, in its network.



TRACTION

There were just over 950 users on the platform in March 2025, including farmers and MSMEs. Of these users, 233 are women.





COUNTRY
Pakistan

FOCUS AREAS
Water
IoT

TEAM
11-50

CIS

provides secure, smart and innovative solutions to global challenges.



PROBLEM

Frequent floods in Khyber Pakhtunkhwa and Punjab, Pakistan, are polluting groundwater, posing a fatal risk to infants and children from contaminated drinking water. Traditional water testing methods are slow, taking 17–24 hours, highlighting the urgent need for faster, automated testing and alert systems to enable timely interventions by water, sanitation and hygiene (WASH) teams.



GSMA PROJECT

In November 2024, CIS received a GSMA grant to install IoT-based water quality chemical and bacterial testing units in vulnerable, flood-prone regions of Khyber Pakhtunkhwa and Punjab. The technology will reduce water quality testing time from 17–24 hours to 6–8 hours. This will minimise the exposure time to contaminated water for a community of 2.85 million people, thereby reducing the risk of waterborne disease outbreaks.





COUNTRY

Pakistan

FOCUS AREAS

Assistivetech
AI

TEAM

11-50

MNO PARTNER

Ufone



PROBLEM

ConnectHear targets at-risk individuals with hearing impairments in Pakistan, where 1.35 million people with disabling hearing loss face communication barriers during disasters. With 27 million displaced since 2008 and no existing solutions for this demographic, the lack of accessible information significantly worsens their vulnerability.



GSMA PROJECT

In November 2024, ConnectHear received a GSMA grant to develop its AI technology to provide online sign language interpretation and AI-generated alerts for 1.35 million at-risk individuals with hearing impairments in disaster-prone areas. Using mobile technology, it empowers marginalised communities by enabling proactive crisis preparedness rather than reactive responses. transactions of 1,760 members of informal savings groups in five Rwandan refugee camps.

ConnectHear

is a social startup led by aspiring youth working for sign language accessibility and deaf inclusion in Pakistan.



**COUNTRY**

Laos

FOCUS AREA

Early warning systems

TEAM

1-10

**PROBLEM**

In Laos, high vulnerability to climate change and frequent floods highlights the urgent need for adaptable, low-cost, open-source EWS to protect communities. Developing such an EWS in Laos would address local socio-economic challenges and provide a replicable model to enhance global resilience to natural disasters.

**GSMA PROJECT**

In November 2024, Somleng received a GSMA grant to develop its customisable open-source EWS platform for multi-use warning, broadcast and commercial functions, with a focus on flood-prone southern Laos. As a digital public good, it will include a payment module to incentivise community maintenance and communication for sustainable EWS.

Somleng

is the world's only open-source Telco-as-a-Service (TaaS) and Communications-Platform-as-a-Service (CPaaS). Somleng reaches remote and vulnerable communities around the world.



COUNTRY

Pakistan

FOCUS AREAS

Early warning systems
AI

TEAM

11-50

Viamo

is a tech social enterprise that provides life-changing information products and services for the international development sector.



PROBLEM

The 2022 floods in Pakistan killed 1,717 people, including 639 children, injured 12,867 and left 2.1 million homeless without access to food or water. The lack of timely, credible information during disasters causes panic and confusion, underscoring the urgent need for real-time, expert-provided, localised guidance to improve disaster preparedness, evacuation and response.



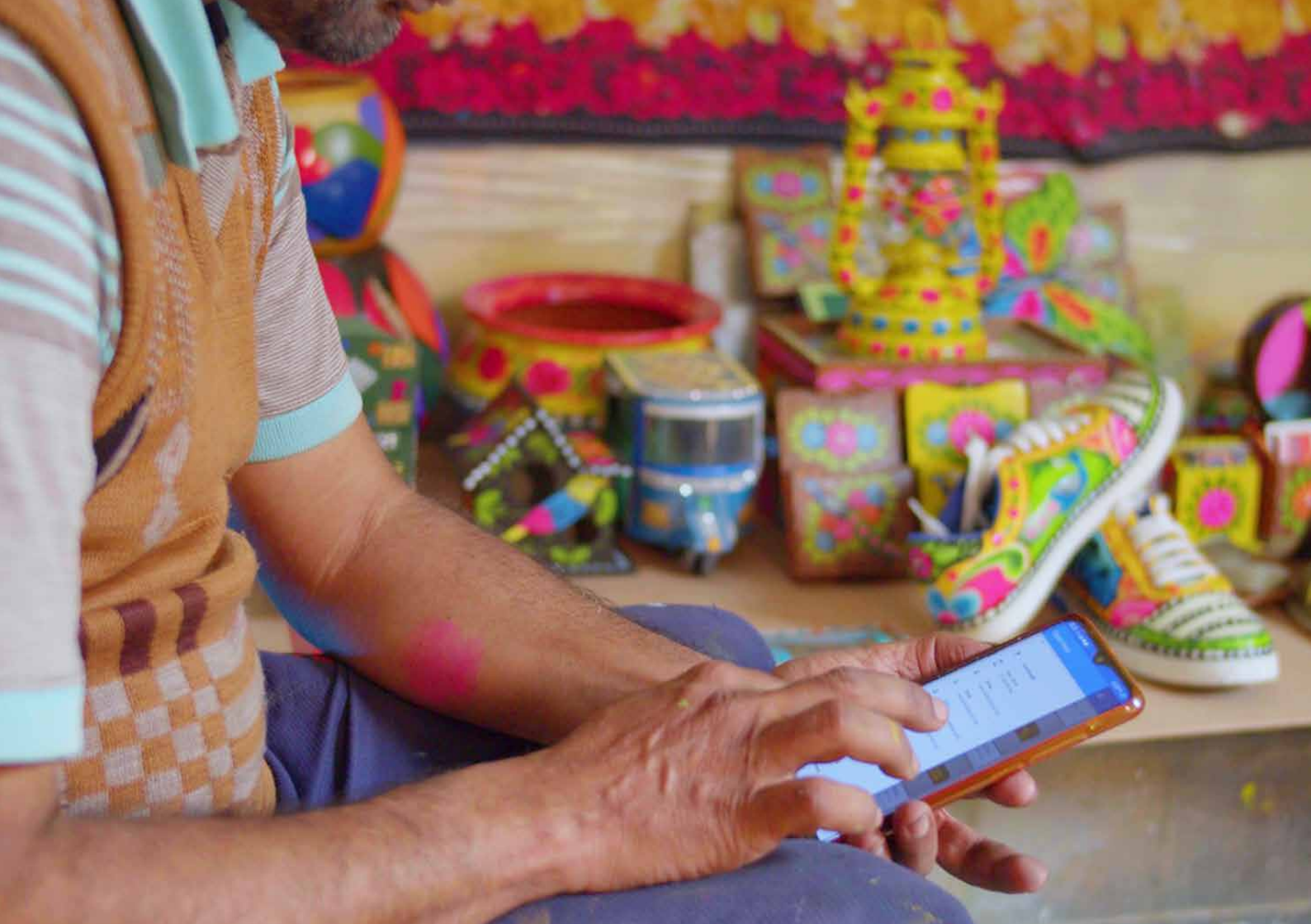
GSMA PROJECT

In November 2024, Viamo received a GSMA grant to develop a voice-first Generative AI Voice Companion on Viamo's toll-free platform with Ufone that allows users to ask open-ended disaster preparedness and response questions in Urdu, receiving personalised advice without needing the internet or a smartphone. The solution will deliver disaster management content in Urdu aligned with Provincial Disaster Management Authority (PDMA) and National Disaster Management Authority (NDMA) curricula to maximise impact and accessibility.





If you are interested in partnering with us or any of our portfolio companies on their impact journey, please reach out to Philippe Bellordre, Head of Innovation Fund at GSMAIF@gsma.com



GSMA Head Office
1 Angel Lane
London
EC4R 3AB
United Kingdom

gsma.com

