

Mobile for Humanitarian Innovation Fund

Portfolio (2017-2022)

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

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

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GSMA Mobile for Humanitarian Innovation

The GSMA Mobile for Humanitarian Innovation programme works to accelerate the delivery and impact of digital humanitarian assistance. This is achieved by building a learning and research agenda to inform the future of digital humanitarian response, catalysing partnerships and innovation for new digital humanitarian services, advocating for enabling policy environments, monitoring and evaluating performance, disseminating insights and profiling achievements. The programme is supported by the UK Foreign, Commonwealth & Development Office.

Learn more at **www.gsma.com/m4h** or contact us at **m4h@gsma.com**

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Foreword

The mission of the GSMA Mobile for Humanitarian (M4H) Innovation programme is to accelerate the delivery and impact of humanitarian assistance enabled by mobile and digital technology. Central to achieving this goal is the M4H Innovation Fund, which with the support and partnership of the UK Foreign Commonwealth and Development Office (FCDO – UKaid) provides catalytic funding and technical support to innovative solutions aiming to address challenges faced during humanitarian emergencies; from sudden-onset disasters to protracted-emergencies and forced displacement.

Mobile and digital technologies can transform humanitarian systems, build resilience and capacity to cope with crises, increase transparency, accountability and ensure dignified, safe and inclusive participation of communities affected by humanitarian emergencies. The M4H Innovation Fund portfolio includes investments which leverage the 'simple' but lifesaving power of an SMS text message, alongside those which design new solutions and business models with cutting edge frontier technologies. Both 'high' and 'low' tech solutions are equally important, where they are appropriate, accessible, safe, and lead to meaningful impact. Implementation organisations of the Fund include social enterprises, private sector organisations, international and local NGOs. Partnerships, key to the success of almost any humanitarian intervention, are prioritised with all grant recipients working collaboratively with others across these sectors, and with the wider mobile and technology industries.

Launched in 2017, the M4H Innovation Fund has provided more than 20 grants, totalling over GBP 6 million, to projects which are implementing across 27 countries. Cumulatively these investments are expected to impact many millions of individuals, with scaling and replication cases already generating significant impact. In addition to the direct impact that they have in improving the lives of people affected by humanitarian emergencies, the lessons and evidence that these projects generate are of critical importance to the wider humanitarian and technology sectors, providing insights into the ways in which organisations can and are utilising mobile and digital technologies to transform humanitarian action. Insights from the portfolio help to answer the key questions of the M4H programme, by identifying sustainable business models, testing new forms of partnership between the humanitarian and private sector, and providing a growing understanding of how to best support pathways to scale for mobile-enabled solutions.

Distributed across three individual rounds of funding, investments can be categorised into four primary groups: **Resilience Building** - Enabling individuals to build their resilience and coping capacity to crises; **Enhancing protection** - Solutions which directly address the protection needs of marginalised people, with an emphasis on women and children; **Improving access to essential services** - Harnessing mobile and digital technology to improve access to water, sanitation and energy services for people affected by crises; and **Investing in technology** - Adapting existing technologies and testing frontier digital solutions to address humanitarian challenges.

Within the following pages you will find a summary of each of the investments, as they were conceptualised at their start. Further information about the impact, pivots, key lessons and future plans for scaling of these projects are being published as they become available, and can be found on the GSMA M4H resource page. Robust monitoring and evaluation studies run alongside the investments, the outputs of which will also be made available. Where projects are of particular interest we encourage you to reach out to the innovators to engage, learn, collaborate, and support. It is through these actions that we will maximise the full potential of these innovations.

Details of how to reach individual projects can be found on the GSMA Innovation Fund grantee portfolio.

In response to the COVID-19 pandemic we launched an "emergency pivot" fund to support existing grantees to be able to respond to the pandemic. Against this backdrop, innovation in the humanitarian space has become even more important as organisations are forced to adapt to a new humanitarian reality. Additional funding was provided to six grantees, with the aim of using their existing mobile-enabled innovations to respond to the challenges of the COVID-19 pandemic. Information on these projects can be found on the GSMA website.

Both the GSMA and the UK's Foreign, Commonwealth and Development Office (FCDO) thank the innovative individuals, teams and organisations working to develop mobile enabled solutions to address humanitarian emergencies, whilst sharing their successes and challenges to support evidence generation on "what works" based on their collective learning and experience. As the scale of humanitarian need increases, innovative solutions, innovative partnerships and innovative thinking will increasingly be needed to meet this growing demand.



Olly Parsons

Director of the Mobile for Humanitarian Innovation Fund, GSMA



Magdalena Banasiak

Head of Technology and Innovation and Senior Adviser, FCDO

The Mobile for Humanitarian Innovation Fund

The Fund aims to promote innovation in the use of mobile technology to address humanitarian challenges.

1

Round 1:

Disaster response

The first round of the Fund focuses on providing support to help to test or scale innovative ideas which support responses to natural disasters and humanitarian emergencies.

2

Round 2:

Complex emergencies and forced displacement

The second round of the Fund focuses on providing support to: test new technical solutions; catalyse ideas to improve or transform institutional systems; and/or to enable solutions to empower, assist or protect individuals and communities affected by complex emergencies and forced displacement.

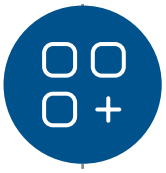
3

Round 3:

Long-term sustainability and scalability

The third round of the Fund focuses on supporting projects which provide solutions to challenges associated with forced displacement and complex humanitarian emergencies. The third round concentrates on collaborative partnerships, and solutions that demonstrate long-term sustainability and scalability beyond this grant.

Projects funded through the M4H Innovation Fund fall into one or more of the following categories:



Resilience Building

Enabling individuals to build their resilience and coping capacity to crises



Enhancing protection

Solutions which directly address the protection needs of marginalised people, with an emphasis on women and children



Improving access to essential services

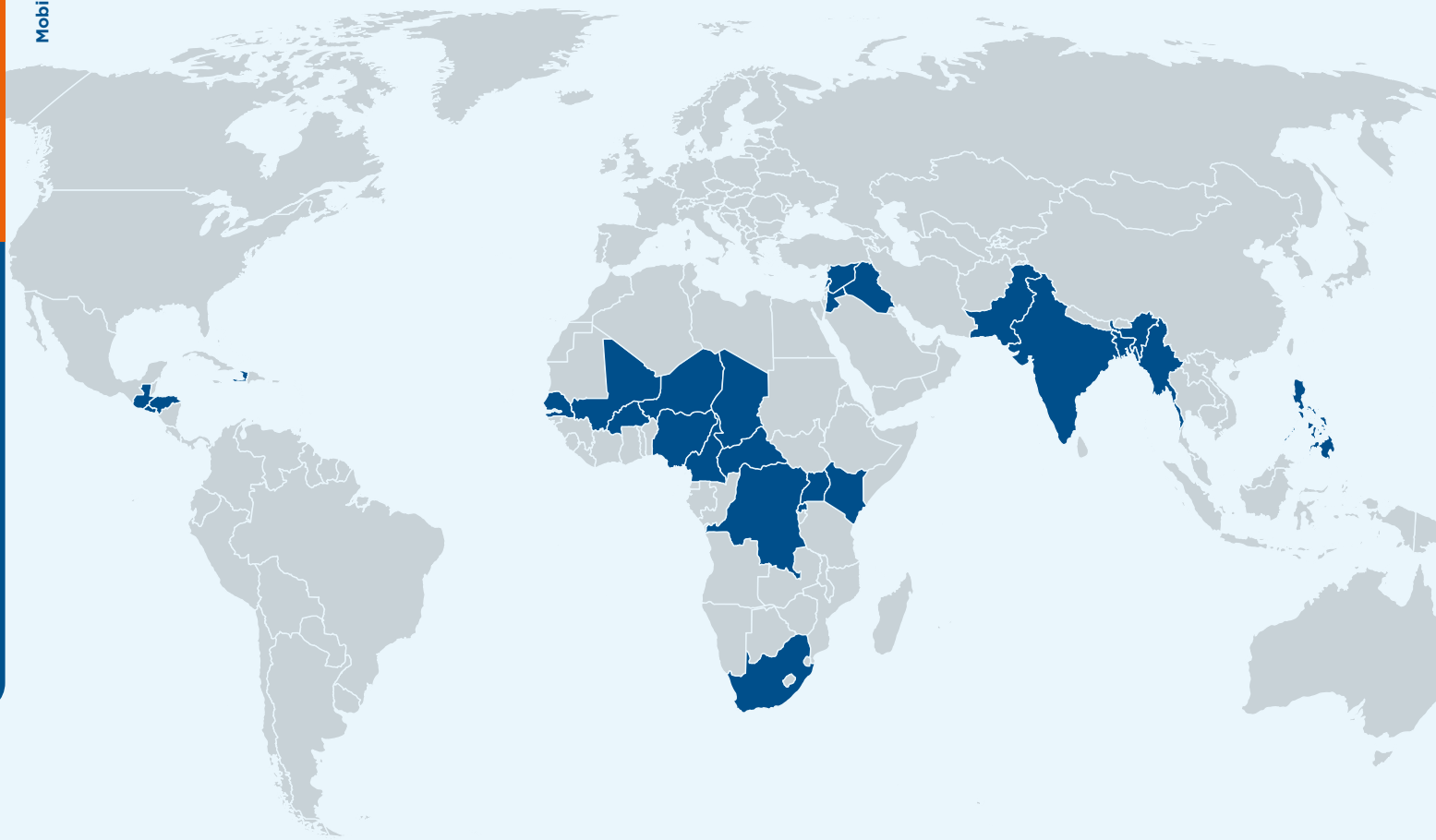
Harnessing digital technology to improve access to water, sanitation and energy services for people affected by crises



Investing in technology

Adapting existing technologies and testing frontier digital solutions to address humanitarian challenges

The Fund's global impact



Syria: No grant funded Ahlan Simsim activities took place in Syria, but project outputs were made available to Syrian communities via project partners

Funded projects:

ALIGHT

altech energie du moment

BBOXX

BritishRedCross

DRC DANISH REFUGEE COUNCIL

welt hunger hilfe
For a world without hunger

EarthSpark INTERNATIONAL

FLOWMINDER.ORG

GeoPoll

INTERNATIONAL RESCUE COMMITTEE

LUMKANI
SAFER TOGETHER

MERCY CORPS

NAYA JEEVAN

NOKIA

NRC NORWEGIAN REFUGEE COUNCIL

OmniVis

REFUNITE
Connecting families

SESAME WORKSHOP

SOLIDARITÉS INTERNATIONAL

rumie

uhd

For up-to-date information on project impact, please visit **gsma.com/m4hinnovationfund**

Alight

Lead organisation:

Alight (formerly American Refugee Committee)

Partner organisations

Biolite, Solaris Offgrid, MTN mobile money

Tag:

Access to essential services

Countries:

Rwanda and Uganda

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

7 AFFORDABLE AND CLEAN ENERGY · 11 SUSTAINABLE CITIES AND COMMUNITIES · 13 CLIMATE ACTION

Through Alight's customer feedback mechanism, 90% of customers have expressed they are generally satisfied with the products and services.

"Digital and use of life-enhancing mobile-enabled services and access to affordable, clean energy will greatly change the life of refugees"

Randhir Country Director Alight Uganda Program



Mwangaza ("Light"): Improving Refugee Access to Clean Energy

Problem:

The project will provide improved energy access equipment (solar light / charging and fuel efficient cook stoves) to refugees.

Solution:

Mwangaza is a market-based approach providing solar off-grid lighting and a clean cook stove solution to refugees in Bidi Bidi (Uganda) and Kiziba (Rwanda) refugee settlements.
Alight and BioLite plan to establish an 18-month intervention for retailing the BioLite HomeStove and SolarHome 620 in Bidi Bidi and Kiziba.

This project will test the adoption of these improvements to energy access, evaluate the effectiveness of different financing methods (conventional consumer finance, Pay-As-You-Go) on product repayment ensuring that target households can develop and adhere to repayment plans, making payments via the use of mobile technology.







Altech

Lead organisation:

Altech Group

Partner organisations:

La Difference, Vodacom, ELAN RDC, UNHCR

Tag:

Access to essential services

Country:

Democratic Republic of the Congo (DRC)

Round:

3 Long-term sustainability and scalability

SDGs Impacted:



"I grew up in a poor rural house, often with no money for kerosene. These experiences motivate me every day."

Washikala Malongo – Co-Founder, Altech Group

"I am a teacher. The Altech lantern helps me when I have to prepare my lessons for the next day. Before I had to wear glasses because I was not able to see well in poor light; now with the Altech solar system, I do not wear glasses anymore."

Jules, Altech SHS customer



Distributed Energy Services for Refugees (DESREF); commercializing solar home systems (SHS) for DRC-based Burundian refugees

Problem:

In rural DRC, where Burundian refugee camps are located, the rate of electrification stands at 0%. Consequently, DRC-based Burundian refugees rely on candles, kerosene lamps and diesel generators for lighting and phone charging. The use of these dirty and expensive energy sources has devastating economic and social impacts.

Solution:

Through our pay-as-you-go (PAYG) model, Burundian refugees acquire SHS without any down-payment and then pay for it in small daily or monthly instalments using mobile money. This approach eliminates the high upfront payment barrier that denies most refugee households access to clean energy. Our SHS will replace the use of candles, kerosene lamps and generators for lighting and phone charging in Burundian refugee camps, thus increasing refugee household income, saving refugee lives and improving refugee students' performance. The SHS includes a 11w solar panel, a 37.44wh lithium battery, 4 bulbs, 4-in-1 phone charging cable, 1 radio and 1 torch.

BBOXX

Lead organisation:

BBOXX Capital RDC

Partner organisations:

Danish Refugee Council, Orange DRC

Tag:

Access to essential services, Resilience building

Countries:

Democratic Republic of Congo (DRC)

Round:

3 Long-term sustainability and scalability

SDGs Impacted:

7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

"Since using BBOXX I now have energy all the time – all my friends come to socialize at my house because I have light and electricity reliably."

Jean-Pierre, BBOXX Customer Goma

"This is a pioneering project that will showcase how humanitarian and private sector can collaborate to transform lives in even the most challenging of humanitarian contexts."

Max Nelki Gopfert (Managing Director, BBOXX DRC)



Using pay-go solar to reduce protection risk for Congolese internally displaced persons (IDPs)

Problem:

The regions of Grand Nord and Ituri in DRC have been at the centre of multiple humanitarian crises which have led to the internal displacement of hundreds of thousands of people, many of whom are living with host families. This has led to a decline in local security due to the strain placed on local living conditions.

Solution:

BBOXX will partner with Danish Refugee Council to expand its pay-go operations to the urban areas of Beni, Bunia and Butembo where it will offer affordable access to PAYG solar systems to communities affected by high numbers of IDPs. Danish Refugee Council will advise BBOXX on mainstreaming humanitarian principles and operating safely in these complex regions as well as leading the monitoring and evaluation for the project. A dense network of shops and points of sale will be established across the target areas. All systems will be GSM connected and remotely monitored by the BBOXX Pulse platform, while all payments will be digitally collected through a partnership with Orange Money.







British Red Cross

Lead organisation:

British Red Cross

Partner organisations:

Kenya Red Cross, Netherlands Red Cross, Safaricom, TYKN

Tag:

Investing in tech, Resilience building

Countries:

Kenya

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Digital identity is an innovative approach that will revolutionise humanitarian assistance to people in need of aid through blockchain technology.



121 Personal Cash Aid

Problem:

121 aims to reduce the costs and inefficiencies in delivering humanitarian aid through cash and voucher assistance (CVAs).

Solution:

The 121 Personal Cash Aid platform is developed as an open-source, mobile first platform.

This innovation will integrate a blockchain-based self-sovereign digital identity module which enables people in need to control a mobile-based, borderless identity that could be used by various humanitarian organizations without the need to register more than once.

As well as enabling low-cost and transparent international transfers, the innovation includes a common cash ledger that anonymously records details of cash transfers to optimise coordination and transparency for donors. This innovation drives humanitarian cash programming by piloting a common platform that could scale globally.







Danish Refugee Council

Lead organisation:

Danish Refugee Council

Partner organisations:

Grundfos Holding A/S

Tag:

Access to essential services, Investing in tech

Countries:

Uganda

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:



The AQTaps will allow communities to manage their water resources in a sustainable and self-sufficient way, and using mobile technology to pay for the water will foster digital financial inclusion and ensure transparency in the management of the resource.

"The DRC/Grundfos partnership combines the best of both worlds; a needs-based approach coupled with a robust, commercially efficient technical solution, effectively making technology work for people."





Market-based approach to provide water to displaced populations using mobile technology.

Problem:

People's ability to access to safe, sustainable, equitable water in refugee settlements.

Solution:

DRC will implement water dispensing units with revenue collection systems, testing a new business model for sustainable water provision in refugee settlements in Uganda.

The GSMA grant would introduce 5 "water ATMS" (AQtaps) into Kyaka II refugee settlement in Uganda, with the goal of introducing a system whereby refugees pay (via mobile technology) for clean, safe water on demand.

The water taps, which are placed at existing water sites, will reduce waiting times for refugees (as they are more efficient than a manual pump) and improve the quality, reliability and provision of water – particularly by reducing contamination. Grundfos will provide the AQTaps along with technical support for maintenance.

Covid-19 Adaptation:

In light of COVID-19, the Ugandan government regulations prohibit charging for water. Instead the DRC team is working to build trust around the mobile money ecosystem; socialize digital literacy and skills required by users; and will provide 500 households with access to a mobile phone, including SIM registration in conjunction with UNHCR, Airtel & MTN Uganda.

Deutsche Welthungerhilfe

Lead organisation:

Deutsche Welthungerhilfe e. V.

Partner organisations:

Action Contre la Faim (ACF) Canada, Fight Hunger Foundation (FHF) India, Federal Ministry for Economic Cooperation and Development Germany, Deutsche Telekom

Tag:

Investing in tech

Countries:

India, Germany

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

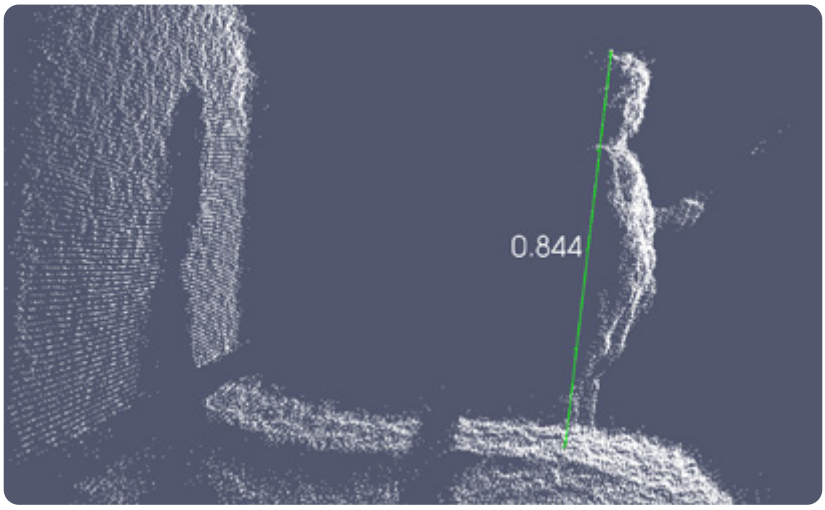
2 ZERO HUNGER

"We should push this up all the way to the government. This has huge potential for real-time and reliable data."

Commissioner Integrated Child Development Services, **Madya Prades**

"3.1M children are dying every year from hunger. Child Growth Monitor could become a game-changer in fighting hunger."

Markus Pohl, Head of Project Child Growth Monitor



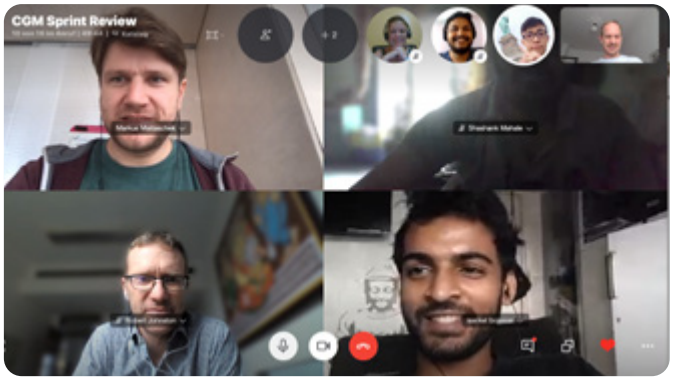
Child Growth Monitor: A game-changing app to detect malnutrition using augmented reality and AI

Problem:

200 million children globally suffer from malnutrition. Traditional measurements used to detect and calculate malnutrition are unreliable.
The Child Growth Monitor platform aims to rapidly and accurately measure child malnutrition. The tool replaces physical measurement, which is time consuming, uncomfortable for the child and challenging for even trained medical staff, and quite often not accurate, with an easy to use digital solution.

Solution:

The app based tool uses image data and AI to diagnose malnutrition, instead of physical scales and measuring boards. A working algorithm for the calculation is currently being improved to enable the required level of medical grade accuracy to be achieved. This project will focus on developing the algorithms and increasing the accuracy of the measurements via the tool. Once the tool is fully developed it will be implemented at scale.



EarthSpark International

Lead organisation:

EarthSpark International

Partner organisations:

Enèji Pwòp, Digicel Haiti, Dunn Family Foundation

Tag:

Investing in tech, Access to essential services, Resilience building

Countries:

Haiti

Round:

3 Long-term sustainability and scalability

SDGs Impacted:

5 GENDER EQUALITY
7 AFFORDABLE AND CLEAN ENERGY
13 CLIMATE ACTION

Throughout Haiti's energy crisis in late 2019, access to the diesel that powers on-grid and off-grid livelihoods were in disastrously short supply. Unlike much of the country, EarthSpark's decentralised solar grid in Les Anglais kept local lights on, water purified, and food insecurity minimised during the nation-wide lockdown. EarthSpark's energy model builds rural community-resilience.

"GSMA's support enables EarthSpark to deepen community resilience benefits of its microgrids and build tools and track record to expand throughout Haiti."

Allison Archambault, EarthSpark International President



Innovating rural climate resilience with microgrid systems and services in Haiti.

Problem:

Haiti's extreme climate vulnerability amplifies the nation's socio-political and environmental crises causing internal displacement and intensifying humanitarian events. With 90-95% of Haiti's rural population experiencing energy poverty underserved communities are exposed to vulnerabilities that further undermine community resilience. The climate threat to island nations necessitates preventative adaptation measures to reduce the cost to livelihoods.

Solution:

EarthSpark's climate adaptive, mobile-enabled, decentralised energy access systems create opportunities to build local climate resilience and prevent the displacement of vulnerable rural communities. Sustainable energy access sits at the nexus of many development pain points. To date, EarthSpark's microgrids have built community-level resilience by displacing the reliance on some dirty fuels, enabling reliable water filtration and energy access during diesel shortages, improved local food security and household air quality, unlocked opportunities for economic development, and established operational standards for microgrids in Haiti. This project will develop mobile-enabled innovations to bolster EarthSpark's climate adaptation activities as we scale community resilient energy access across rural Haiti.



Flowminder Foundation

Lead organisation:

Flowminder Foundation

Partner organisations:

Digicel Haiti, Vodafone Ghana

Tag:

Investing in tech, Resilience building

Countries:

Haiti, Ghana

Round:

1 Disaster response

SDGs Impacted:



"One of the key challenges during an emergency is getting help to those who need it the most as efficiently as possible. The issue is timely access to accurate information about the movements of people, particularly after a natural disaster, so we waste a lot of time and money trying to get food, shelter and other assistance to those who need it. A tool like FlowKit could really change things. This could save lives, not just time and money."

Christine Latif, World Vision

Taken from Flowminder's white paper; FlowKit: Unlocking the power of mobile data for humanitarian and development purposes. *2019. (page 10).*

"FlowKit helps mobile operators and agencies to unlock the power of mobile data for humanitarian and development purposes."

Jonathon Gray, FlowKit Developer & Analyst at the Flowminder Foundation

FLOWMINDER.ORG Digicel haiti vodafone



Rapid Mobility Estimates from CDR for Efficient Disaster Response

Problem:

Displacement during a crisis can have severe effects on people's wellbeing. Delivering resources, such as food, to the right place at the right time is critical to support those in need.

Solution:

FlowKit is an open-source toolkit that allows for the safe and secure processing and analysis of Call Detail Record data (CDR) automatically generated by mobile operator networks for billing purposes. FlowKit is designed to facilitate the production of de-identified CDR aggregates that can be used for many applications linked to population movements or characteristics.

Flowminder has developed FlowKit to provide mobile network operators and humanitarian and development actors with the tools required to securely analyse Call Detail Records (CDR) and estimate population flows before, during and after disasters. FlowKit has been developed so that it is installed and controlled by the operator within its premises. This enables MNOs, Flowinder or other partners, to generate automated analytics which can be used by humanitarian and develop actors to understand where best to target relief efforts following a crisis. FlowKit is currently installed in several countries globally, including Haiti and Ghana where Flowminder released mobility reports during the COVID-19 outbreaks, among other projects.

GeoPoll

Lead organisation:

GeoPoll

Partner organisations:

World Food Programme

Tags:

Investing in tech, Resilience Building

Countries:

Burkina Faso, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Mali, Niger, Nigeria

Round:

3 Long-term sustainability and scalability

SDGs Impacted:



"We are excited to use the power of mobile phones to generate more granular, timely food security data to support critical humanitarian programmes in the Sahel".

Quote from joint project leads who are:

Nicholas Becker
Chief Executive Officer
GeoPoll

Jonathan Rivers
Head of Hunger Monitoring Unit, Research, Assessment and Monitoring Division
World Food Programme



Generate more granular and timely food security data to improve the responsiveness of humanitarian programmes in the Sahel.

Problem:

A lack of granular and real time food security data in the Sahel, where an estimated 29.2 million people are food insecure, means that humanitarian programme decisions are not based on the most accurate information so cannot be agile or responsive to changing community needs in the Sahel.

Solution:

The project will gather information directly from communities via mobile technology enabled live voice call surveys to respondent's mobile phones, combined with data from multiple sources to increase the granularity of food security data. The project will also aim to attain anonymized Call Data Records to increase the location granularity of the food security data collected from the current level of Administrative level 1 (i.e. province) to a deeper level of Administrative level 2 and 3 (i.e. district or village). For the live voice call surveys, interviewers will utilise GeoPoll's proprietary mobile phone application which enables data to be collected in real time, and includes high levels of data quality control, risk management and safeguarding, and duty of care procedures.





International Rescue Committee UK

Lead organisation:

International Rescue Committee UK

Partner organisations:

Glasswing International

Tag:

Enhancing protection

Countries:

El Salvador, Guatemala and Honduras

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

5 GENDER EQUALITY

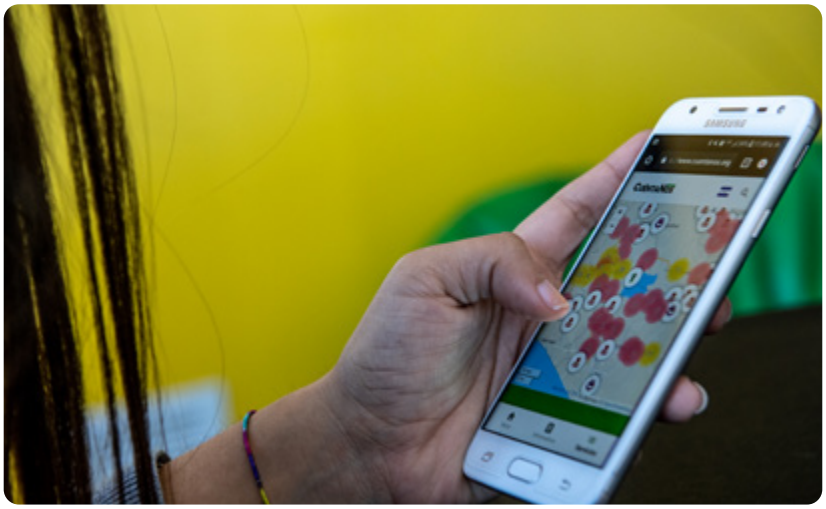
10 REDUCED INEQUALITIES

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

CuéntaNos User, **Lorena Mancia**

"CuéntaNos is an innovative answer to a complex problem in humanitarian response. At the IRC we are proud to have had the support of GSMA, to not only deepen the project's impact in El Salvador, but expand it to Honduras and Guatemala reaching vulnerable communities with life-saving information, access to services, virtual psychosocial support and physical safe spaces."

Katie Susman,
Deputy Director of Programmes



Protection for vulnerable women and the LGBTQ+ community through access to life-saving information online (CuentaNos.org) and physically through safe spaces.

Problem:

El Salvador and Honduras are two of the most violent countries that are not at war, with sky-high rates of gender-based violence. Marginalised groups experience greater barriers accessing relevant and life-saving information, placing them at further risk for future harm and displacement. CuentaNos.org addresses this problem.

Solution:

CuentaNos.org is an interactive platform, placing life-saving and life-sustaining information for those affected by violence. Users are empowered to seek services based on their needs, location or future destination in-country through a dynamic map that offers information on services such as protection, shelter, health, education and legal assistance. CuéntaNos serves multiple purposes: helping people in high-risk situations get assistance in their moments of crisis, as well as serving as a case management and referral tool for local organizations. The project will expand to Honduras and Guatemala, whilst establishing a safe space centre in El Salvador, complementing digital access through physical, safe and supported access to timely information, plus psychosocial support and survivor-centred referrals to services.

Lumkani

Lead organisation:

Lumkani

Partner organisations:

Islamic Relief SA,
Hollard Insurance

Tags:

Resilience building,
Investing in tech, Access to essential services

Country:

South Africa

Round:

1 Disaster response

SDGs Impacted:



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

Nomfusi.

Nomfusi survived with only minor burns to her legs.

"We have seen first-hand the impact that this simple intervention has had in preventing devastation amongst the most vulnerable communities"

Francois Petousis



A fire detection and micro-insurance product.

Problem:

The Lumkani system assists vulnerable communities in South Africa's informal settlements to avoid a cycle of increasing poverty due to accidental fires within settlements, a massive socio-economic and humanitarian challenge.

Solution:

The GSMA grant funding provided support for the scale up of the IOT fire prevention device to 20,000 homes within informal settlement homes in South Africa. The smart devices provide autonomous, real-time monitoring and 2-way SMS alert to residents allowing the verification of fire events instantly. Once installed residents are able to opt-in to a micro-insurance scheme provided by Hollard Insurance, which will insure their homes against damage or loss to fire. Lumkani worked with Islamic Relief South Africa to identify the most appropriate settlements for roll out of the devices and to build awareness through their community networks.







Mercy Corps

Lead organisation:

Mercy Corps

Partner organisations:

Viamo, Digicel

Tags:

Resilience building, Investing in tech

Country:

Haiti

Round:

1 Disaster response

SDGs Impacted:



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

Villejean, a farmer in Bayonnais

"CHANTER has been recognized as an effective tool to support local efforts to reduce vulnerabilities and improve communities' preparedness and response capacity to natural hazards by providing relevant information that allow individuals and communities to take action to protect their lives and property prior to a disaster."

Amos, Rural Resilience Program Manager



Communities in Haiti Access New Technologies for Early warning/Response (CHANTER)

Problem:

Loss of income and the risk of physical harm as a result of weather shocks, as well as the time and cost of post-shock recovery.

Solution:

CHANTER delivered a 12-week curriculum via Viamo's mobile communications platform that supported beneficiaries to better identify and prepare for weather extremes. Content has been developed following a human-centered design approach to suit communities needs and tailor messages to users' preferences. CHANTER used SMS and Interactive Voice Response (IVR) technology to disseminate customized preparedness messages to users according to livelihood activity and location. The coupling of tailored messaging with follow-on visits to communities by local community-based organizations ensured that consumers of the information took action on that information, thus reducing their vulnerability. CHANTER also developed early warning messages to be sent by SMS ahead of major weather events and tested these in a simulation exercise.





Naya Jeevan

Lead organisation:

Naya Jeevan

Partner organisations:

Sukaar Foundation, doctHERS, Telenor

Tags:

Resilience building, Access to services

Country:

Pakistan

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:



"I am thankful to Naya Jeevan and Sukaar Foundation for their tele-veterinary care services. Previously we had to travel far and wide to seek treatment for our livestock, but now we have access to it in our own village, which saves us a lot of time and money."

Ramesh Kumar, Lohnyar village

Muhnjo Sohno Thar is increasing the resilience of Thari people through livestock insurance, capacity building and inclusive employment for women and financial inclusion for households.





My beautiful Thar: How Mobile Technology can Reduce Forced Displacement

Problem:

In the Tharparkar region, communities are largely made up of cattle herders who are faced with the sociological and financial risk of having to migrate due to drought conditions. The project proposes to provide mobile based solutions to increase the resilience of this community, protecting them from having to migrate.

Solution:

My Beautiful Thar is a multi-stakeholder collaboration that is focused on using mobile technology to increase the resilience of Thari people. The project proposes to provide a bundle of mobile based solutions (mHealth, mobile money, m-insurance for livestock, veterinary services) to the vulnerable communities in 8 villages situated in the Thar desert, Sindh province of Pakistan.
Services will include insurance (paid through mobile money) and health and veterinary services, partially delivered through mobile-enabled teleconsultations with qualified doctors and veterinarians.

Covid-19 Adaptation:

Naya Jeevan will train a cohort of eight frontline health workers and twelve remotely located female general practitioners on how to screen for mental health disorders (including post-traumatic stress disorder, PTSD) in response to COVID-19. They will screen approximately 250 households across eight villages for signs and symptoms of mood disorders (anxiety/depression), PTSD and gender-based violence via a baseline survey. Naya Jeevan will also offer mental health-seekers private, weekly, 30-45 minute video-consultation sessions with a licensed psychologist or psychiatrist (audio-consultations may be used where 4G connectivity is unavailable). Naya Jeevan expects to be able to treat a total of 196 patients weekly for 12 weeks.

Nokia Saving Lives

Lead organisation:

Nokia Saving Lives

Partner organisations:

Smart Communications; Philippines Red Cross

Tags:

Investing in tech, Resilience building

Country:

The Philippines

Round:

1 Disaster response

SDGs Impacted:



Following the Porac 2019 earthquake, infrastructure was assessed by the Nokia Saving Lives solution together with the Red Cross Team to improve awareness of structural damages. The NSL solution was used to assess potentially unseen damages in a preventive manner around a collapsed supermarket area. Data was also collected that could be useful to aid future planning and rebuilding.



Providing communications technology and technical assistance to emergency response teams.

Problem:

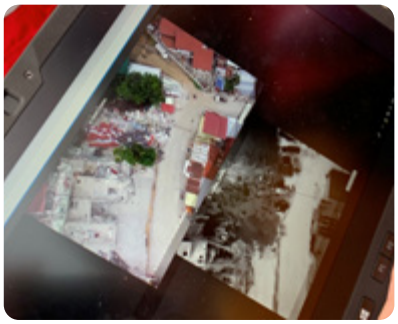
Reducing response time of the Red Cross due to a lack of connectivity in the event of disaster. A connectivity solution, NSL enables first response teams to collect data through LTE connected UAV's in case of large natural disasters during which Mobile Networks might be damaged or not accessible.

Solution:

The system consists of drones, a portable data centre, a mobile broadband network and applications such as video streaming, gas sensing, mapping and analytics. In the Philippines, Smart Communications will provide high-speed connectivity for the Nokia drone system and in the event of a disaster, the system will be deployed by a fully trained Nokia Saving Lives volunteer group to support the response capabilities of the Philippines Red Cross.







Norwegian Refugee Council

Lead organisation:

Norwegian Refugee Council

Partner organisations:

Koe Koe Tech (KKT) and Statelessness Network Asia Pacific (SNAP)

Tags:

Resilience building, Enhancing protection

Country:

Myanmar

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

5 GENDER EQUALITY

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

"Digital Information Platform created by using an inclusive approach provides easily accessible information to vulnerable communities in remote areas of Myanmar."

A community volunteer woman in Taungoo who has been helping IDPs to obtaining Household Lists, CSCs and birth certificates is now more motivated in her work due to the MayMay application. She said *"sometimes the Ministry of Labour, Immigration and Population staff do not like me asking questions and they are not helpful with providing answers but now I can get information about civil documentations through this MayMay application. I can use this application to help people and I can share this App with people in need".*



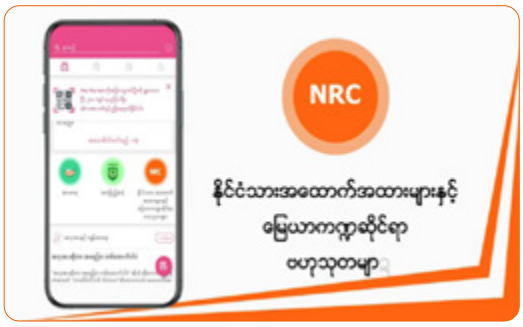
Strengthening Digital Access to Needs-Based Protection Information for Internally Displaced Populations (IDPs)

Problem:

Displaced communities within Myanmar typically face significant barriers in realising housing, land and property rights and legal identity rights. A key barrier is lack of accessible information on the relevant application processes linked to enjoying housing, land and property and legal identity rights.

Solution:

This project focuses on facilitating increased access to information on Housing, Land and Property and legal identity rights through the already successful mobile application 'May May'. Users can access a NRC portal with relevant information on HLP and legal identity rights.



OmniVis Inc.

Lead organisation:

OmniVis Inc.

Partner organisations:

icddr,b, Code for Africa

Tag:

Investing in tech

Countries:

Bangladesh, Kenya

Round:

3 Long-term sustainability and scalability

SDGs Impacted:



OmniVis wants to work with NGOs and water testing organizations to detect and report cholera pathogen presence in water. Together, we can use this information to enable rapid resource deployment and management for water remediation and patient care.

The GSMA grant enables us to work with users on the ground whose experiences create the biggest impact behind what we develop.



A handheld device to rapidly detect cholera in water.

Problem:

Cholera causes approximately 3 million cases across 41 countries each year, with costs of up to two billion USD annually in treatments and lost productivity that could be avoidable through early detection. Current cholera detection platforms are time intensive, costly, and imprecise, exacerbating widescale disease outbreaks throughout the world.

Solution:

OmniVis' hardware device and single-use disposable test kit (razor/razorblade model) reduces the detection process from three to five days down to 30 minutes, accurately and affordably. Additionally, OmniVis' data gathering & reporting tools provide insights over disease hotspots; enabling earlier warning before wide-scale

Covid-19 Adaptation:

OmniVis will work with on the ground partners to expand water testing sites, while simultaneously creating connections with mobile network operators so that their cloud-based portal can be used to send alert notifications to local communities about cholera outbreaks. This helps address the compounding effects of cholera and Covid-19, both of which are in part prevented through clean sanitation and access to fresh water. outbreaks occur.

OmniVis wants to work with NGOs and water testing organizations to detect and report cholera pathogen presence in water. Together, we can use this information to enable rapid resource deployment and management for water remediation and patient care.

LevelApp

Lead organisation:

Refunite

Partner organisation:

Malet Labs

Tags:

Investing in tech, Resilience building

Country:

Uganda

Round:

1 Disaster response

SDGs Impacted:



"Before LevelApp my parents frequently had to choose between buying groceries and investing in my education"

Moju Sara, South-Sudanese Refugee & LevelApp worker

"LevelApp has helped me provide food for me and my siblings, I buy a sack of maize flour and more. Now I am even working to pay school fees for my younger sisters. Thanks LevelApp."

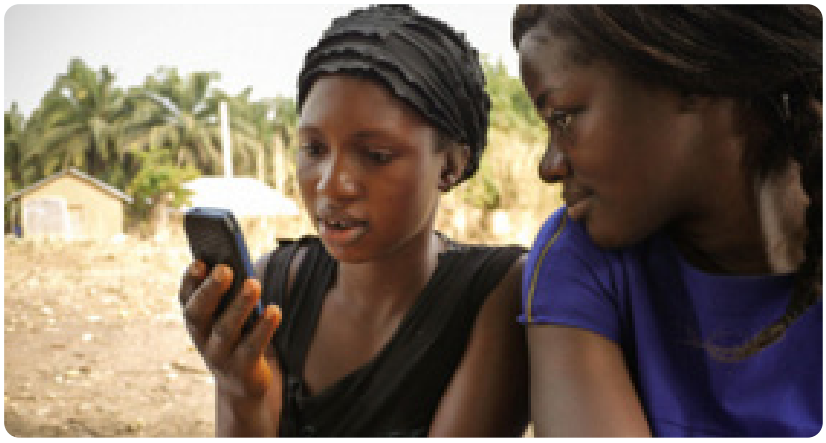
Olive Kirungi is one of more than 28,664 LevelApp users. She's a refugee from Kiryandongo who has been delivering quality work through LevelApp.

"LevelApp extends digital work opportunities to underserved refugee communities in Uganda"

Alexander Bugge, COO REFUNITE.

REFUNITE Connecting families

LEVELAPP



LevelApp: Mobile Data Categorization for Instant Refugee Income in Uganda

Problem:

The mobile-enabled solution, LevelApp, will improve people's resilience and recovery before, during and after humanitarian emergencies and make them less dependent on external aid.

Solution:

LevelApp is a micro-tasking platform which provides users (refugees in Kiryandongo settlement, Kampala and Uganda's rural communities) with a small income for each verified "task" or correctly categorized image completed through their mobile phone.

REFUNITE's Data Categorization Application creates instant revenue generation for refugees via a simple mobile phone interface that lets users engage in image categorization tasks that are in high demand by various industry players.

There are different levels as users become more skilled, to a point where they become 'qualified' to work on commercial datasets.



Sesame Workshop

Lead organisation:

Sesame Workshop

Partner organisation:

International Rescue Committee

Tag:

Enhancing protection

Countries:

Jordan, Lebanon, Iraq and Syria

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:

3 GOOD HEALTH AND WELL-BEING

Engaging and providing parents and caregivers with digital content that is educational and entertaining has become even more important and Sesame Workshop is excited to be working with GSMA on this grant.





Optimizing the use of mobile phones in Ahlan Simsim – Sesame Workshop's early childhood development program in the Middle East, implemented in partnership with the International Rescue Committee

Problem:

The overall project, aims to improve the lives of children affected by crisis and displacement by providing specially designed digital content, addressing socio-emotional needs while challenging gender assumptions and modelling new paradigms for male and female emotional expression.

Solution:

The project aims to extend the existing Ahlan Simsim initiative through the development of a suite of mobile-based multimedia Sesame Workshop content that will be regularly distributed to target audiences (parents and caregivers) using Facebook and WhatsApp groups. This will allow Ahlan Simsim to deepen engagement and interaction with existing beneficiaries while also extending reach to new individuals, not only including parents and caregivers in the project but enhancing likelihood of children engaging with the content.

Solidarites International (SI)

Lead organisation:

Solidarites International (SI)

Partner organisation:

Twilio

Tags:

Investing in tech,
Enhancing protection

Country:

Lebanon

Round:

3 Long-term sustainability and scalability

SDGs Impacted:







SOLIS Mobile WhatsApp Bot communication channel for refugees

Problem:

The deficiency of a systematic accountability system towards beneficiaries who thus feel their requests, feedbacks and complaints are not enough taken into consideration. Resulting in lack of capacity to reinforce their social capital, resilience, and data ownership.

Solution:

Our innovation is a WhatsApp bot service. An automated messaging platform for beneficiaries to communicate with any organization. It works like traditional automated voicemail services but using WhatsApp, this channel being the most convenient and used by both host and refugees population. The system proposes options and adapt its messages based on respondents' answers to guide her/him through to deliver the requested information or service. The bots are linked to a customer relationship management (CRM) system tailor made for the humanitarian sector. It contains all information and status on aid request needed to provide WhatsApp users high quality, accurate information.

Covid-19 Adaptation:

With high infection rates and income-making opportunities drying up, the need for refugees to reach out to humanitarian organisations has been exacerbated. However, movement restrictions have made this even more difficult. In response , SI will increase development on the Whatsapp bot by incorporating Machine Learning into it. This is designed to improve efficiency of conversations with refugees, provide more accurate answers on an extended scope of topics (particularly Covid-19) and reduce the need for mass group trainings and face-to-face feedback A smarter bot leads to refugees being given a faster, better and more appropriate response to their concerns.

The Rumie Initiative

Lead organisation:

The Rumie Initiative

Tag:

Enhancing protection

Country:

Global

Round:

3 Long-term sustainability and scalability

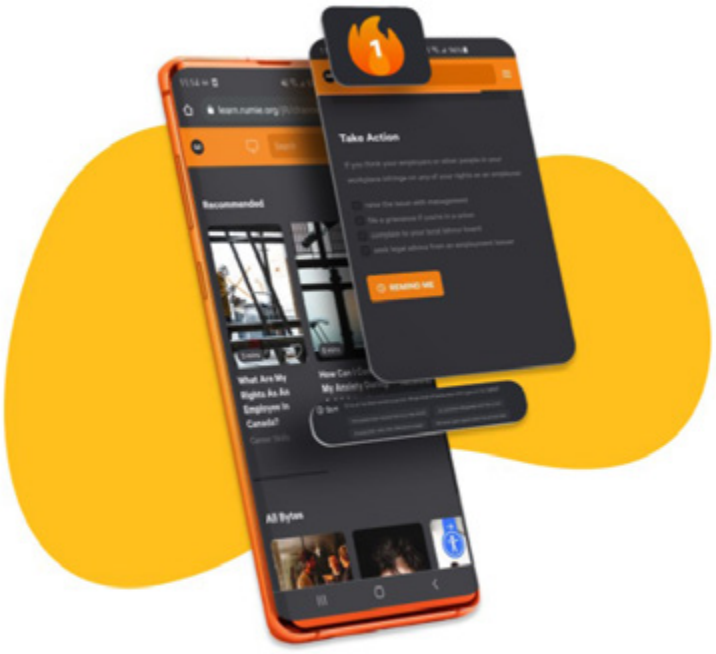
SDGs Impacted:



"The GSMA funding enables Rumie to expand and scale by providing access to learning resources for women and girls."

Jamshid Hashimi - Program Manager





Increasing access to digital learning resources, specifically for women and girls.

Problem:

Across the world access to education in humanitarian settings remains a significant challenge. Women and girls in particular are impacted by this global crisis. Without access to quality learning resources that are tailored to the learner and cultural setting, systems of poverty and marginalization are reinforced and prevent resilience and improved livelihoods.

Solution:

Rumie is an award-winning technology non-profit that creates innovative technology solutions to facilitate free online learning content creation and digital distribution. The content is accessible to learners around the world on devices of their choice and works even when learners have little or no Internet connectivity. Our tool, Rumie-Build, enables rapid, collaborative authoring of digital bite-size micro-learning modules by partner organizations or volunteers. Access to these learning modules is through Rumie-Learn, which is always free to learners and is a mobile-first, data-driven library of localized microlearning content on topics designed to meet the learner's needs. The platform is cohesive, accessible and interactive, collecting learner feedback every step of the way.

United Healthcare Distributors

Lead organisation:

United Healthcare Distributors

Partner organisation:

VAC Solar UK Limited, Medical Teams International, Quality Medicines for All, Aptech Africa, Airtel Uganda

Tags:

Access to essential services, Enhancing protection

Country:

Uganda (West Nile Region)

Round:

2 Complex emergencies and forced displacement

SDGs Impacted:



"I am very grateful for MOPO. I now have employment and my financial status has improved. I can continue my further education and support my parents. My community now has affordable power and can charge their phones. Before they slept with a dangerous candle, now the battery provides safe light."

Zura – one of the Lessees who distributes the MOPO Battery Packs.

The MOPO project has provided new opportunities to poor refugee communities in settlement camps and towns in off-grid areas.





Enabling women access energy and create sustainable livelihoods using innovative batteries and mobile phone technology

Problem:

In the West Nile project area there is no access to sustainable power outside of one or two towns. Refugee camps have limited access to expensive diesel power. The only access to energy for refugees in poor rural communities is dangerous, polluting kerosene for lamps.

Solution:

An innovative portable battery solution that can be rented by refugees in Rhino refugee camp and surrounding areas. The battery is light, portable, easy to use, waterproof, lockable and tamperproof. The goal is create a commercially sustainable business model using community buildings and health clinics to act as a "secure hub" for charging and distributing the batteries. Near Field Communication and mobile technology is used to pay, track and measure usage. Uganda will be the first time that a scaled rollout has been initiated. This will also be the first time the technology is implemented in a humanitarian situation.

Covid-19 Adaptation:

UHD is implementing a 'COVID-19 response and business continuity plan' to effectively scale the provision of community solar hubs (CSHs) used to charge portable smart batteries for rent/distribution at an affordable fee to lessees and then households. The project responds to COVID-19 by increasing distribution points and lessees in order to safely serve customers, improving smart battery distribution to reduce disease transmission; embedding infection prevention and control at CSHs and distribution points; and improving the Portable Power (POPO) app to introduce more flexible hire period and payment processes, reducing need for face-to-face contact. The proposal also includes procurement of additional smart batteries.

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For more information, please visit the
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