

Mobile for Humanitarian Innovation

Annual Report

February 2021

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GSMA

The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.

For more information, please visit the GSMA corporate website at www.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 will be 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 COVID-19 pandemic is, not surprisingly, a central theme of this annual report of the GSMA Mobile for Humanitarian Innovation (M4H) programme. The global pandemic has pushed the expected number of people in need of humanitarian assistance and protection in 2021 to 235 million, an increase of 40 per cent from pre-pandemic levels[1]. As such, the M4H mission to accelerate the delivery and impact of digital humanitarian assistance has never been more crucial.

The M4H programme was launched in 2018 with support from the UK's Foreign, Commonwealth & Development Office (FCDO). Since then, the hypothesis that connectivity is a lifeline for people affected by humanitarian crises has been tested and demonstrated. Over the past year, COVID-19 has amplified this fact in ways we could not have imagined. Communities affected by disaster, disease, conflict and displacement continue to prioritise mobile technology, not only to communicate, sustain and recover their livelihoods, seek information and protection and reunite with loved ones, but also as a tool to access humanitarian assistance.

Working closely with committed GSMA mobile industry members and a dynamic group of humanitarian partners, M4H has been able to adapt and learn – in real time – how to use mobile technology to address humanitarian needs and manage the risks in this new reality most effectively. A focus on dignified, safe and inclusive aid for communities affected by humanitarian crisis has guided the work of the programme. From understanding the barriers that crisis-affected communities face, to diversifying the M4H portfolio with new technology solutions and replicated successes, the programme has reached 5.8 million people to date. Important lessons have been captured along the way. These will be used to implement the final year of this phase of the programme, and to guide the wider sector in developing and delivering new technologies and innovations to solve pressing humanitarian challenges.

This report documents the progress of the M4H programme and partners in 2020, highlighting the key trends impacting the humanitarian sector in this unprecedented year, and summarising the activities and outcomes of research, the M4H Innovation Fund, strategic partnership projects and advocacy efforts.

Both the GSMA and FCDO would like to take the opportunity to thank all the partners of the M4H programme for their tireless work and collaboration over the past year. We look forward to continuing to build a digital humanitarian future together with you and affected communities.



Kimberly Brown
Head of GSMA Mobile
for Humanitarian Innovation



Chris Porter
Humanitarian Head of Profession
The UK's Foreign, Commonwealth
& Development Office

1 UN OCHA (1 December 2020), Global Humanitarian Overview 2021.



Introduction

2020 was a year like no other. The outbreak of COVID-19 heightened the global need for humanitarian assistance by exacerbating existing crises and creating new ones. By the end of 2020, the UN Secretary General warned that COVID-19, together with increased conflict and climate change, "created the greatest humanitarian challenge since the Second World War"[2].

The global economic crisis that followed widespread lockdowns has worsened this desperate situation, stretching humanitarian budgets to their limits and forcing humanitarian agencies to reimagine their operating models and do more with less. In this context, the role of mobile technology and opportunities for humanitarian organisations to digitise humanitarian assistance have become more prominent. For those affected by crisis, mobile technology has never played a bigger role – connecting people with loved ones and enabling access to health information, financial services, social protection interventions and humanitarian assistance.

Mobile for Humanitarian Innovation (M4H), a multi-year programme running from 1 April 2018 through 31 March 2022, and funded by the UK's Foreign, Commonwealth & Development Office (FCDO), the GSMA and its members, is uniquely positioned to help stakeholders embrace the opportunities of mobile technology to address humanitarian needs. The M4H vision is of an inclusive, digitally enabled humanitarian future in which mobile and digital solutions provide greater access to services, information and choice for people that could be, or already are, affected by crisis.

Over the past 12 months, it has become clear that more stakeholders are embracing this vision. Demand has increased for the activities, lessons, expertise and convening power of the M4H programme. A reimagining of the role of the mobile industry and private sector in the humanitarian system is underway, spurred by the tumultuous new reality of COVID-19.

This annual report captures the activities and progress of the M4H programme and its partners in this unprecedented year. It spotlights key achievements, reflects on trends influencing the sector and summarises the insights and outcomes of research, strategic partnership projects, advocacy efforts and the M4H Innovation Fund.

Armed with many years of experience, including three rounds of the Innovation Fund, the programme now plans to synthesise, analyse and document lessons learned, while also exploring trends that can inform the team's work. These efforts will help guide the humanitarian and mobile industries towards an inclusive, digitally enabled future.

The M4H team looks forward to engaging with new and existing partners, and to hearing reflections on the programme's work and approach.

2 United Nations Secretary-General (1 December 2020), Secretary-General's video message to launch the 2021 Global Humanitarian Overview.



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Snapshot of achievements

In the past year, the M4H programme diversified its portfolio of innovative projects and scaled and replicated successes, reaching a cumulative 5.8 million people. New strategic partnerships were created to advance digital cash distribution, and research and advocacy efforts ensured that digital interventions were designed to be inclusive. To help these solutions scale, M4H worked with governments to create more enabling environments for crisis-affected populations. Time and resources were spent responding to heightened demand from COVID-19, adapting projects and activities to the new challenges of the pandemic and capturing and documenting important lessons along the way (see Box 1).

Key achievements from 2020 (for more, see the M4H in action section):

- **Sparked innovation:** The programme contracted eight new grantees under Round 3 of the Innovation Fund, bringing the M4H portfolio to 22 grants in total (including the inaugural Disaster Response round). To date, Innovation Fund projects have directly impacted the lives of 714,000 people, with four grantees scaling or replicating in new contexts (Lumkani, Refunite, Mercy Corps and Flowminder).

- **Facilitated five new partnerships** between MNOs and humanitarian organisations, reaching a total of 19 partnerships. The portfolio of projects implemented by the programme has impacted 454,000 people in humanitarian contexts who are now better able to access and use life-enhancing mobile services.

- **Replicated two business models in new countries,** training mobile money agents on Humanitarian Code of Conduct principles (MTN Rwanda and Uganda in partnership with Alight) and providing digital financial literacy training for female mobile money agents (in partnership with Grameen Foundation).

- **Became a stronger thought leader.** The M4H programme published 10 reports, translated from English into an additional four languages. In 2020 alone, M4H reports were cited at least 44 times and downloaded around 15,000 times. Of note was the Digital Lives of Refugees report, which was downloaded 3,146 times and cited 21 times by stakeholders such as UNHCR, UNDP and ODI.

- **Highlighted the messages of M4H** at 30 in-person and online events globally, 12 of which were organised by the GSMA, reaching over 600 people.

- **Influenced policy change** in Kenya, unlocking access to vital mobile services for recipients of a digital ID project led by the Kenya Red Cross Society (KRCS), and documented the steps and events that culminated in a policy shift in Uganda that enabled approximately 600,000 refugees to legally register for mobile services in their own name.

- **Provided capacity building training** to over 150 policymakers representing over 16 governments and intergovernmental bodies, including The World Bank and the International Telecommunication Union (ITU).

BOX 1:
The COVID-19 response

As COVID-19 spread around the world, the number of people in need of humanitarian assistance rose significantly[3], creating momentum for the humanitarian sector to embrace digital technology in their programming.

In response to this heightened demand and interest in using mobile technology to address humanitarian challenges, M4H contributed its expertise, partnerships and lessons learned since 2012, including the Disaster Response programme. The following activities have helped ensure that mobile technology plays an important role in the COVID-19 response:

- Supported FCDO's Social Protection Approaches to COVID-19: Expert advice helpline (SPACE) to explore the role of mobile technology in addressing the primary and secondary impacts of COVID-19, especially on social protection systems.
- Drew on lessons from the Disaster Response programme and the GSMA Humanitarian Connectivity Charter to gather information on MNO initiatives and share insights on the GSMA Mobile for Development COVID-19 response portal, including a "Pandemic Response in Action" blog series (KDDI Japan, Turkcell, Vodafone, Millicom and Cassava Fintech Burundi).
- Convened the M4H Advisory Group to share lessons, discuss programme activities and agree on joint advocacy actions.
- Published and promoted several practical recommendations for governments and central banks to facilitate the use of mobile and mobile money platforms in humanitarian assistance during COVID-19, including co-authoring an article on the World Economic Forum's website. Information on the regulatory outlook was also gathered to support the pandemic response.
- Through the M4H Innovation Fund, awarded additional, targeted funding for six existing grantees[4] to adapt their projects in response to COVID-19 and ensure their services continue.

Beirut explosion crisis response

Under the umbrella of the GSMA Humanitarian Connectivity Charter, the programme continued to respond to rapid and slow-onset crises. Following the Beirut explosion in August 2020, M4H facilitated connections between UNDP and mobile network operators in Lebanon to disseminate rapid socio-economic assessment surveys through bulk SMS to people affected in Beirut and its immediate suburbs. This coordination enabled UNDP to leverage mobile technology to rapidly assess the affected populations' needs, disseminating a total of 2000+ messages and calls, and 718 completed surveys.

3 Nichols, M. (30 November 2020), "COVID-19 drives 40% spike in number of people needing humanitarian aid, U.N. says", Reuters.
4 Grantees were required to meet set eligibility requirements to be considered for additional funding.

Mobile technology trends in the humanitarian sector

This section takes stock of prevailing trends related to the role of mobile technology in the humanitarian sector and how they are shaping humanitarian action. While few of these trends are new, COVID-19 brought many of them into sharper focus.

Trend 1:

The pandemic has accelerated the need for inclusive digital humanitarian assistance

COVID-19 has been a catalyst for rapid change and innovation in humanitarian action[5], sparking action and debate across the entire humanitarian sector. This has included calls for reform – to more locally led action and decolonised approaches to aid. In parallel, the power of mobile technology to enable communities to express their needs and to inform their decision making and choices was recognised by more actors, shining a light on the importance of mobile technology in the lives of people affected by crisis. In the face of COVID-19, humanitarian actors and mobile operators had to adapt to a grim new reality. As humanitarian needs grew, so did restrictions on movement and physical contact, making it more difficult to provide services to affected populations in person. Very quickly, demand grew for delivering humanitarian assistance digitally.

The pandemic demonstrated the working hypothesis of the M4H programme: that connectivity is a lifeline for people affected by humanitarian crises, with the ability to shift power dynamics by offering efficient, expedient and dignified access to information and assistance. COVID-19 therefore brought mobile technology into sharp focus as a tool for humanitarian assistance and, importantly, raised awareness of the risks involved.

Trend 2:

There is a greater focus on digital ethics, privacy and data protection

While the fast-paced digitalisation of humanitarian assistance provides many benefits, it also carries risks. The inability to access or use digital tools can mean that the benefits of digital and financial inclusion are not realised, or worse, lead to exclusion from basic services and vital information (see Trend 3).

5 OECD (December 2020), Innovation, development and COVID-19: Challenges, opportunities and ways forward.

Ethical questions around the digitalisation of humanitarian assistance also include respect for individual privacy and personal data protection. Since both are considered an integral part of protecting life, integrity and dignity[6], it is of fundamental importance for humanitarian organisations.

The M4H programme has drawn on the GSMA's wealth of policy expertise, which include data protection and privacy guidelines, including ones specific to COVID-19, to support organisations coping with this complex and fast-changing situation. We also convened important sessions focusing on these critical issues.



Trend 3:

Accountability to affected populations and inclusion are being prioritised, raising awareness of the digital divide

Digitising services can offer transformational benefits to people affected by crisis. However, it can also inadvertently exacerbate inequalities, due to digital divides (such as the digital gender and disability gaps among refugees). This is a particular risk for groups who are disproportionately affected by humanitarian crises and have distinct needs, such as women, the elderly, ethnic minorities, persons with disabilities and those who lack formal identification. The digital divide has long been a major obstacle to digital humanitarianism, but COVID-19 has triggered a step change in the awareness of digital divides, their intersectional dimensions and the importance of addressing them.

It is imperative that mobile-enabled products and services are designed with and for the most marginalised recipients, as this will allow humanitarian actors and mobile operators to better understand their perspectives, experiences and feedback. This is in line with Grand Bargain Commitment 6, a "Participation Revolution", to include people receiving assistance in making decisions that affect their lives. Human-centred design and other inclusive methods are key to being accountable to the populations that humanitarian actors have a mandate to serve. M4H has been providing guidance for the humanitarian sector and MNO partners to adopt these methods, from making mobile technology more accessible for persons with disabilities to understanding the user journeys of mobile money-enabled cash recipients.



Trend 4:

A climate emergency is underway

Over the past decade, 83 per cent of disasters triggered by natural hazards were due to extreme weather, and climate-related events killing over 410,000 people[7]. In the past year alone, catastrophic climate-related events, including bushfires, wildfires, tropical cyclones, record rainfall and locust plagues, touched every corner of the globe. Communities affected by conflict are disproportionately impacted by climate change, which intensifies humanitarian needs, increasing displacement, disrupting food production and weakening healthcare systems.[8]

These events have reinforced the need for better preparedness and response capabilities, and the role of mobile technology in addressing the climate emergency, from mitigation to response and recovery. Through the Humanitarian Connectivity Charter, M4H has continued to work with MNO members to ensure telecoms infrastructure is resilient to extreme climate events.

6 ICRC (2020), Handbook on data protection in humanitarian action. Second Edition.
7 ODI (2020), UNGA 75: two priorities to address climate breakdown.
8 ICRC (9 July 2020), "ICRC report: Climate change and conflict are a cruel combo that stalk the world's most vulnerable". News Release.

The programme has also funded innovative solutions, such as using call detail records (CDR), to improve humanitarian decision making and early warning systems, and to strengthen the resilience of communities most at risk of climate change. These solutions were featured at GSMA Thrive Africa virtual event.



Trend 5:

Digital cash assistance is proving to be a scalable solution

The volume of cash and voucher assistance (CVA) has doubled over the past few years, accounting for 17.9 per cent of all humanitarian assistance in 2019, up from 10.6 per cent in 2016.[9] The COVID-19 pandemic not only increased the amount of CVA delivered, but also accelerated the shift from physical cash to mobile money-enabled cash assistance. Because measures to contain COVID-19 have limited mobility and personal interactions, physical distribution of cash and payments instruments have become riskier and more difficult[10]. The provision of digital cash through mobile money is considered one of the most effective digital tools in the COVID-19 response[11], with the ability to work at scale for humanitarian payments, as well as social safety net payments, if enabling regulation is in place.

In addition to supporting several initiatives e.g. Social Protection Approaches to COVID-19: Expert advice helpline (SPACE) and partners with digital cash assistance, in August 2020[12], M4H launched a global partnership with the United Nations World Food Programme (WFP). The three-year collaboration focuses primarily on the use of mobile money to deliver digital assistance through cash-based transfers, with the aim to save lives in global emergencies, including pandemics and natural disasters.



Trends to watch

in 2021

In 2021 and beyond, the M4H programme will be closely following the trends outlined here and their impact on the humanitarian and digital technology sectors.

There are countless other important trends that we have witnessed in 2020. An integral piece of M4H's work is identifying and understanding the potential of frontier technologies, such as AI, blockchain and big data, to improve humanitarian action. The programme is continuing to pilot and scale such technologies through the Innovation Fund and Strategic Partnerships projects, while also testing new and innovative partnership models that are critical for long-term sustainability. Trends and lessons from these frontier technologies and partnership models will be shared in the year ahead.

Time will tell whether COVID-19 will be the catalyst that shapes the humanitarian sector for years to come. In the meantime, M4H is committed to ensuring that mobile technology plays a central role in creating an inclusive digital humanitarian future.

9 CaLP (2020), "Executive Summary", The State of the World's Cash 2020: Cash and Voucher Assistance in Humanitarian Aid.
10 CGAP (September 2020), Social Assistance Payments in Response to COVID-10: The Role of Donors.
11 Bryant, J., Holloway, K., Lough, O. and Willitts-King, B. (2020), Bridging humanitarian digital divides during COVID-19. ODI Humanitarian Policy Group.
12 GSMA (6 August 2020), "GSMA and World Food Programme accelerate the use of mobile financial services for humanitarian assistance".



"Through 2020, UNHCR and the GSMA strengthened their partnership through the organisation's Digital Inclusion and Mobile for Humanitarian Innovation (M4H) programmes, respectively. UNHCR believes the M4H programme plays a vital role in supporting the humanitarian community to further the digital inclusion of forcibly displaced persons, through a combination of research, advocacy, capacity building and strategic partnerships.

In 2020, UNHCR worked closely with the GSMA on a number of forward-thinking initiatives, such as a human-centred design research project in Kenya on the digital inclusion of refugees with disabilities that led to a deeper understanding of barriers to their digital inclusion. UNHCR has utilised such research to inform its own programming moving into 2021, and specifically to enhance UNHCR's call centre in Kenya."

UNHCR Innovation Service

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M4H in action

Insights and research

In 2020, the M4H programme continued to build robust evidence to support MNOs and humanitarian organisations in delivering effective digital humanitarian assistance. Activities focused on three strategic areas:

1. Using **human-centred design** approaches to guide the design of inclusive digital interventions;
2. Extracting **lessons from the M4H portfolio**, including how Innovation Fund grantees and strategic partnership pilots fared during the COVID-19 pandemic; and
3. Creating and delivering **toolkits and training** to build capacity and promote the adoption of standardised approaches to digitising humanitarian assistance.

Driving uptake and adoption of research

To encourage knowledge exchange and adoption of insights, the M4H programme disseminated key messages at 30 global events to a range of private and public sector stakeholders and the humanitarian community. The programme also strengthened its position as a thought leader, with M4H reports downloaded around 15,000 times and cited 44 times in 2020 alone.

"GSMA is a treasure trove of information that can inform decision making and guide our direction."
Godfrey Kyama, Better than Cash Alliance

Human-centred design research

Human-centred design (HCD) is a practical and iterative methodology for problem solving that puts the end user at the centre of the process. It has become something of a buzzword in the humanitarian sector and for good reason, as it proves critical when designing inclusive digital interventions in humanitarian contexts. By developing a deep understanding of user's lives, the challenges they face and the tools they use, humanitarian actors, mobile operators and researchers can craft solutions and digital programming that target user needs and are accessible to users, particularly marginalised populations. In 2020, the M4H programme used an HCD approach in two projects, outlined below, and documented the methodology for others in the sector to adopt.



The digital lives of refugees and Kenyans with disabilities in Nairobi

At the start of 2020, the M4H programme used HCD methods to better understand how refugees and Kenyans with visual and hearing impairments in Nairobi use mobile technology, and the opportunities it could provide. Working with end users, Butterfly Works, Safaricom and UNHCR Innovation, the project uncovered how service providers can address barriers and target user needs in a more accessible way. By the end of the project, the programme had documented the methodology, identified research tools that could be used in other contexts and generated five tips for inclusivity in human-centred design.



Mobile money-enabled cash assistance: user journeys in Burundi

Building on the programme's previous work on operationalising mobile money-enabled CVA, in 2020, the M4H team partnered with Ground Truth Solutions to delve further into understanding the lived experiences of people receiving mobile money-enabled cash assistance. The report applies an HCD approach, working with Concern Burundi's cash recipients to provide insights into key recipient characteristics, the main "touchpoints" along the user journey and factors that enhance and/or frustrate the user experience. The insights support humanitarian organisations and mobile money providers in their efforts to improve programming and unlock the benefits of digital and financial inclusion.

The programme's HCD approach has proven to be a useful way for humanitarian organisations and MNOs to think through how they can ensure decisions are made with the needs and preferences of the end user in mind, and are designed in a way that strengthens accountability to affected populations, rather than treating users as passive recipients of aid.

Lessons from the M4H portfolio

Monitoring, evaluation and learning (MEL) is a cornerstone of the M4H programme, and in 2020 over 20 innovative mobile solutions were supported through the M4H Innovation Fund and Strategic Partnership portfolios. These projects received tailored support based on evaluations and active learning. Discrete project lessons from some of the programme's early grantees are captured in upcoming case studies (Lumkani, Mercy Corps and REFUNITE), and the M4H team has also analysed and synthesised lessons from the first five completed Innovation Fund projects, mapping insights against M4H's learning agenda questions. In 2021, the programme will publish a synthesis of lessons from the Strategic Partnership portfolio and continue to share case studies of the projects receiving support.

Given the impact of COVID-19 on all M4H's live projects, a COVID-19 response analysis was conducted to identify trends in digital programming, document how the M4H portfolio shifted or maintained services in humanitarian contexts using mobile technology and how MNOs engaged in this process. M4H collaborated with the Overseas Development Institute's Humanitarian Policy Group, sharing a platform to disseminate findings to interested stakeholders.

Toolkits and training



Connectivity Needs and Usage Assessment (CoNUA)

There is continued need and demand for robust data (beyond anecdotal evidence) on digitising humanitarian assistance in an inclusive and appropriate manner, as seen with the Digital Lives of Refugees. Collecting robust data to understand how people in humanitarian contexts are currently accessing and using mobile technology, quantifying mobile gender and disability gaps and highlighting barriers (from users' perspectives), all elicited deeper thinking – and more action – on designing inclusive digital humanitarian assistance.

To meet the demand for data, M4H (in partnership with REACH and supported by the Emergency Telecommunications Cluster, or ETC) created the Connectivity Needs and Usage Assessment (CoNUA) toolkit that enables others to replicate the methodology and collect standardised data in any humanitarian context. The toolkit will bolster the evidence base on digital access and needs, overcoming one of the key barriers to digitising humanitarian assistance on a large scale.



Online mobile money CVA training course

In 2020, the shift to mobile money CVA continued to accelerate, in part due to COVID-19 damaging livelihoods and increasing the need for assistance across the globe. M4H responded to multiple requests from stakeholders seeking to use mobile money for cash delivery, both for humanitarian assistance and social safety net payments. It is clear that COVID-19 has accentuated the humanitarian-development nexus, and heightened the need for collaboration across humanitarian and development communities, especially with cash programming.

With so many new actors digitising payments, M4H partnered with the Digital Frontiers Institute to convert M4H mobile money handbooks into free online training courses, accessible to stakeholders operating in humanitarian or development contexts around the world.





Partnering During Crisis: The Shared Value of Partnerships between Mobile Network Operators and Humanitarian Organisations

At the core of any successful digital intervention is a solid partnership. Over the past year, M4H worked closely with four MNOs (in Mozambique, Iraq, Pakistan and Palestine) to explore their partnerships with the humanitarian sector, including what motivated them to engage, their experiences to date and the shifts that needed to take place within their organisations. The research provides evidence to encourage the broader ecosystem to adopt mutually beneficial partnerships dedicated to providing sustainable services to people affected by crisis.

In 2021, the team will synthesise lessons from the M4H portfolio, map evidence against the programme's learning agenda questions, test and pilot the CoNUA toolkit and deliver mobile money training. Thought leadership pieces will also be published to support the M4H vision and mission to guide the sector towards an inclusive digital humanitarian future, while also laying the foundation for the next iteration of the programme.

M4H Innovation Fund

In 2020, the M4H Innovation Fund continued to provide funding and support to organisations using mobile technology to deliver innovative products and services that respond to humanitarian challenges.

With the portfolio fully funded, M4H has focused attention on continuing to support grantee organisations to roll out their products and services, fill capacity gaps and learn from implementation lessons and insights. As many of the projects in the portfolio begin to realise their goals, examples of positive mobile-enabled impact are emerging across the board, and more solutions are being scaled and replicated.

8 New Projects
awarded grant funding in 2020

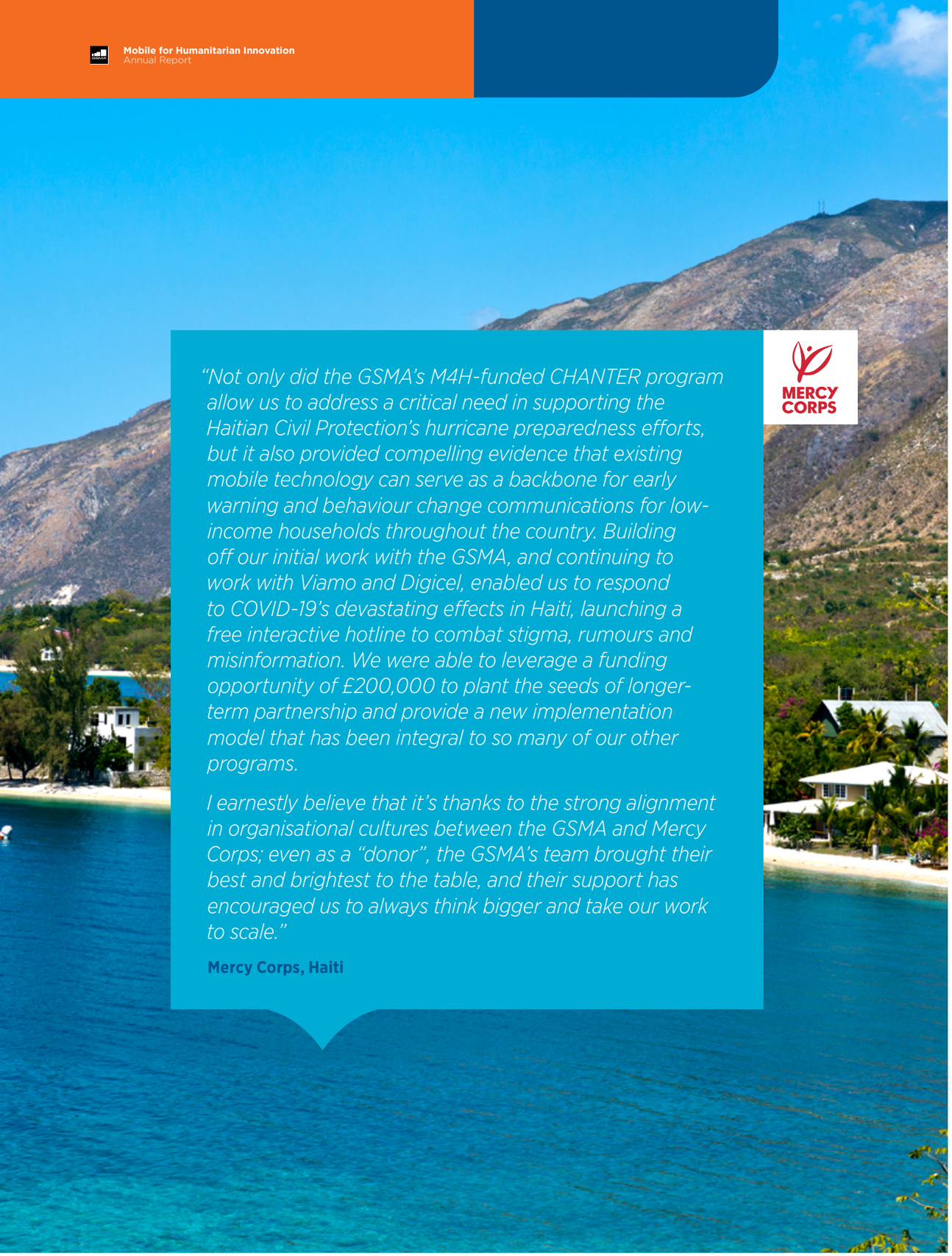
6 Projects
provided with additional funding to adapt to COVID-19

22 Projects in total
in the M4H Innovation Fund portfolio

27 Countries
covered by project implementation

714,000 people
have been impacted to date

4 funded projects
have been replicated in 1+ additional markets



"Not only did the GSMA's M4H-funded CHANTER program allow us to address a critical need in supporting the Haitian Civil Protection's hurricane preparedness efforts, but it also provided compelling evidence that existing mobile technology can serve as a backbone for early warning and behaviour change communications for low-income households throughout the country. Building off our initial work with the GSMA, and continuing to work with Viamo and Digicel, enabled us to respond to COVID-19's devastating effects in Haiti, launching a free interactive hotline to combat stigma, rumours and misinformation. We were able to leverage a funding opportunity of £200,000 to plant the seeds of longer-term partnership and provide a new implementation model that has been integral to so many of our other programs.

I earnestly believe that it's thanks to the strong alignment in organisational cultures between the GSMA and Mercy Corps; even as a "donor", the GSMA's team brought their best and brightest to the table, and their support has encouraged us to always think bigger and take our work to scale."

Mercy Corps, Haiti

Spotlight on humanitarian innovation

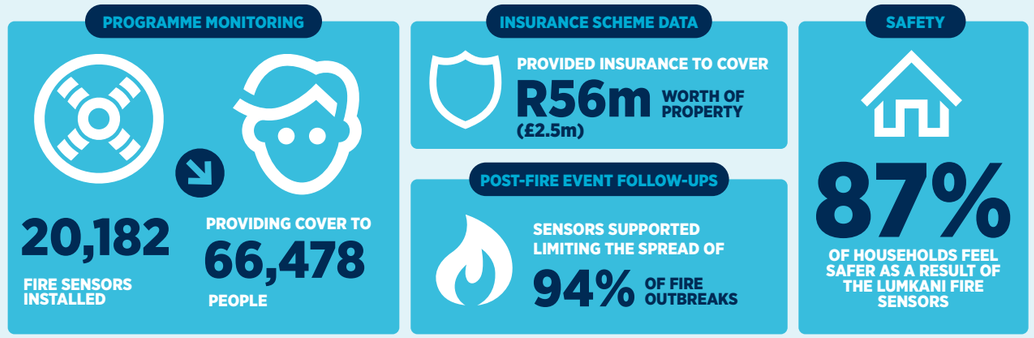
M4H grantees develop innovative solutions in four main focus areas. Here are some examples.



1. Resilience Building - Enabling individuals to build their resilience and coping capacity to crisis events

Lumkani – fire detection and microinsurance

The Lumkani system assists vulnerable communities in South Africa's informal settlements to avoid a cycle of poverty resulting from accidental fires in settlements, a massive socioeconomic and humanitarian challenge. The smart devices provide autonomous, real-time monitoring using machine-to-machine (M2M) technology and two-way SMS alerts to residents that allow instant verification of fire events. Once the Lumkani device is installed, residents can opt in to a microinsurance scheme provided by Hollard Insurance, which will insure their homes against damage or loss to fire. Lumkani has begun trialling the system in Kenya, working in partnership with the KRCS. It is anticipated that working in partnership with mobile money providers will expand access to the Lumkani service for even more customers.





2. Improving access to essential services – harnessing digital technology to improve access to water, sanitation and energy services for crisis-affected people

Altech – Distributed Energy Services for Refugees (Desref)

Through the Altech pay-as-you-go (PAYG) model, Burundian refugees in the Democratic Republic of Congo (DRC) can acquire a solar home system (SHS) without any down payment and pay for it in small daily or monthly installments using mobile money. This approach eliminates the high upfront payment barrier that has previously denied access to clean energy for many refugee households. Altech is working with Vodacom DRC to provide access to the Desref service. Vodacom has integrated Altech's customer relationship management (CRM) system with M-Pesa and included Altech Group on the M-Pesa menu. Vodacom also collaborates with Altech Group on marketing, distribution and sales by training M-Pesa agents to support new Desref customers to sign up and Altech agents to attract potential customers to M-Pesa.



3. Enhancing protection – solutions that directly address the needs of crisis-affected people, with an emphasis on women and children

International Rescue Committee (IRC) – CuéntaNos

Through the CuéntaNos platform and network of safe spaces, the IRC supports the protection of vulnerable women and the LGBTQ+ community from violence. CuentaNos.org is an interactive mobile-enabled platform that provides access to life-saving and life-sustaining information for those affected by violence. Users are empowered to seek services based on their needs, location or future in-country destination through a dynamic map, which provides information on protection, shelter, health, education, legal assistance and other services. CuéntaNos is currently live in El Salvador and Honduras, and recently launched in Guatemala.



4. Investing in technology – testing frontier digital solutions and adapting existing technologies to new problems

Welthungerhilfe – Child Growth Monitor app

Over 200 million children globally suffer from malnutrition. The Child Growth Monitor app is an easy-to-use digital product that rapidly and accurately measures child malnutrition, replacing physical measurement, which is time consuming, often not accurate, uncomfortable for the child and challenging for even trained medical staff. The app-based tool uses image data and AI to diagnose malnutrition. Initial development and implementation have been focused in India, where 55,000 children have received a more accurate measurement of malnutrition than they would have with physical measurement processes alone. The Welthungerhilfe team has increased the accuracy of the tool across several key metrics, and are working towards a full release of the Child Growth Monitor tool in 2021. Partners include the WFP, Microsoft and Deutsche Telekom.

COVID-19 adaptation funding

Many of the organisations receiving M4H grant funding were impacted by COVID-19. The programme adopted a flexible approach, working with grantees to assess the impact of the pandemic on the implementation of their solutions. While some implementation models were severely disrupted, grantees have been able to adapt, pivot and continue to deliver services despite the pandemic.

The mobile components of many grant projects have proven resilient to the impacts of COVID-19 and, in most cases, have become even more critical given physical distancing requirements. It has mainly been the human-delivery element of projects that has been most disrupted. This not only demonstrates the resilience and utility of mobile technology as a delivery mechanism, it also underscores the need to identify and mitigate the "weakest link" of any innovation in a humanitarian context.

The pandemic highlighted weaknesses in systems, with restrictions on movement severely affecting the accessibility of services for end users, and the ability of humanitarian organisations to provide essential services. This has tested assumptions of accessibility, physical contact and mobility, forcing organisations to adapt their operating models. For example, a sophisticated information exchange system is highly effective, but only if a member of the implementing team can access the organisation's office. Mobile-enabled energy services in a refugee camp setting require technicians to travel to the camp to install them. Mobile-enabled products and services require customers to physically visit service kiosks to renew leases or switch batteries. All these efforts are made more challenging or impossible by social distancing and lockdown restrictions. The work that has been undertaken to overcome these barriers in the (hopefully) short term will ultimately make these services more resilient, not only to the impacts of COVID-19, but to a range of potential disruptions in the future.

From a project implementation perspective, activities such as user training events or feedback and evaluation sessions have also been restricted, making it necessary to pivot to virtual forms of engagement wherever possible. Restrictions have also affected the management of M4H grant projects since there is limited access to offices. This will change the way some organisations manage their financial reporting.

In addition to the flexibility and support provided across the M4H portfolio, it was recognised that many current grantees were well positioned to go above and beyond their original project scope to address the challenges associated with the COVID-19 pandemic. Supported by the FCDO, the M4H Innovation Fund has been able to offer additional, targeted funding to six existing grantees (Box 2). The aim of this funding is to support existing projects to adapt to COVID-19 challenges, and ensure that their services can continue to function.

BOX 2:
COVID-19 adaptation funding

United Healthcare Distributors, Uganda: Implementing a COVID-19 response and business continuity plan, increasing distribution points for the UHD battery exchange service and further developing smart battery functionality to improve customer access and safety.

International Rescue Committee, Guatemala: Based on the success of the CuéntaNos programme in El Salvador and Honduras, and in response to the rise of gender-based violence (GBV) during the COVID-19 pandemic, the IRC is replicating and expanding CuéntaNos to support women, girls, survivors of GBV and the LGBTQI community in Guatemala, providing critical information and access to key services.

Naya Jeevan, Pakistan: Providing new mobile-enabled services in addition to veterinary care and livestock insurance, including screening and support for those with mental health disorders and for individuals at risk of GBV.

Danish Refugee Council, Uganda: Adapting project roll out plans to focus on enhancing community readiness for digital services, raising awareness of the DRC water ATM system for future use once COVID-19 restrictions are eased.

Solidarités International, Lebanon: Enhancing the SOLIS Whatsapp bot with machine learning to make conversations with refugees more efficient, provide more accurate answers on a wider range of topics (with a focus on COVID-19) and reduce the need for large group training sessions.

OmniVis, Kenya and Bangladesh: Addressing the compounding effects of cholera and COVID-19 by expanding water testing sites, as well as partnering with MNOs to facilitate SMS alert notifications to local communities about cholera outbreaks.

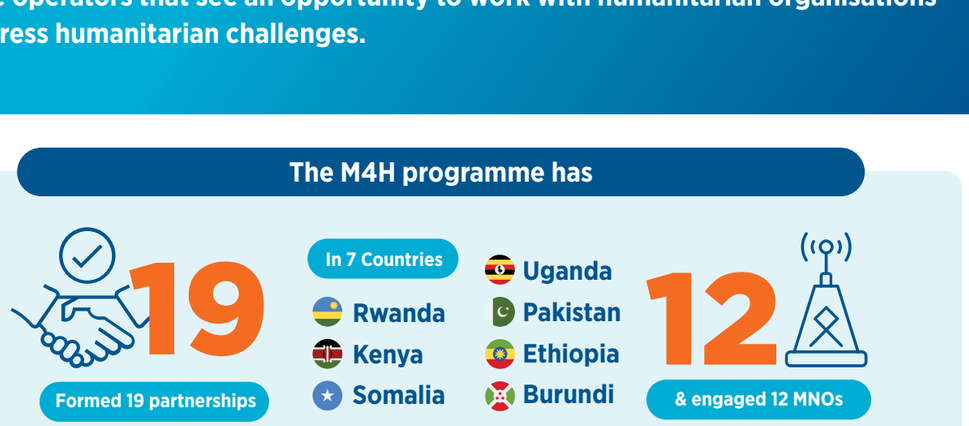
The year ahead

In the coming year, the M4H programme will be launching a virtual curriculum for innovators using mobile technology to enhance humanitarian service delivery. The curriculum will combine existing and new resources, tools and training materials on key processes in the innovation journey, with a focus on mobile innovation in humanitarian contexts. The curriculum will strengthen the ability of M4H to offer remote capacity building support to grantees and M4H stakeholders, and serve as a valuable resource for the sector.

The M4H team will continue to consolidate lessons from across the portfolio, demonstrating where successes and challenges have helped answer the programme's key learning agenda questions, and build a foundation for future work on mobile-enabled humanitarian innovation.

Strategic partnerships

The primary aim of M4H strategic partnerships is to catalyse partnerships between mobile operators and humanitarian partners. In 2020, we worked with even more mobile operators that see an opportunity to work with humanitarian organisations to address humanitarian challenges.



The M4H programme has formed 19 partnerships in eight countries, primarily in Africa, and has engaged with 12 mobile operators to share M4H's expertise, develop projects and explore future partnerships.

Given the number of projects and the complexity of the issues the partnerships address, the M4H team developed four overarching categories to synthesise lessons and identify trends across the M4H portfolio.

1. Strengthening foundations – building the capacity of local humanitarian actors and service users to engage with the digital economy

In 2020, M4H launched the Digital Financial Literacy Training Guide in collaboration with the Grameen Foundation, MTN Uganda and the GSMA Connected Society programme. The guide is designed for organisations seeking to train women as mobile money agents. Similarly, 540 youth graduated from the Innovation Centre, which was formed under the ReHope BRIDGE project, a collaboration of Mercy Corps, UNHCR and the Community Technology Empowerment Network (CTEN) in Bidi Bidi settlement in Uganda. The innovation centres are designed to provide employment by equipping refugees and host communities with digital skills through courses in entrepreneurship, data collection and analysis, mobile technology, basic ICT and computer maintenance and repair. Such training programmes build the capacity of people to be agents of change in their own communities.

In Rwanda, in partnership with MTN, Rwanda's Knowledge Lab, Alight and UNHCR, the M4H programme is providing young refugees and host communities in Nyabiheke and Gihembe refugee camps with training in coding languages. The project is already demonstrating positive impacts, with students using their newly acquired skills to gain employment in supporting small businesses in their communities.

2. Innovative partnerships – testing or integrating innovative new partnerships between the private sector and humanitarian community

In Rwanda, the KUHI[13] consortium brought together four humanitarian organisations, two mobile operators and a fintech, using the complementary expertise of each agency to create an inclusive environment for refugees in Rwanda in line with the Government of Rwanda's commitment to the Comprehensive Refugee Response Framework (CRRF). In Ethiopia and Somalia, with technical assistance from M4H, consortium members agreed to explore, initiate and accelerate the adoption and scaling of mobile money solutions for humanitarian interventions.

These country-focused partnerships engage multiple humanitarian organisations and mobile operators, and have allowed both sides to identify local issues they both face, develop practical solutions and agree on common action plans to deliver digital humanitarian assistance more effectively.

3. Innovative new technology solutions – testing or integrating innovative new technology solutions or using existing technology in new ways

In Somaliland, together with CARE International and Telesom, M4H successfully piloted the use of Voice ID technology to authenticate recipients of mobile money-enabled cash assistance. The pilot demonstrated a sustainable business case for both Telesom and CARE, and together they have extended the service to 2,000 households. This has greatly complemented CARE Somalia's traditional door-to-door authentication, a process that was time consuming and required significant human resources. The Voice ID Project benefited from lessons and best practices shared by Safaricom in Kenya, and is now being considered by other organisations to create efficiencies in their cash assistance programmes.

World Vision Rwanda, supported by the M4H team, has partnered with Exuus Ltd, a Rwandan tech company, to use their SAVE platform to support savings groups. The SAVE platform is a digital platform that allows members of Village Savings and Loans Associations (VSLAs) to save using mobile money through both MTN and Airtel. The platform allows members to contribute to their savings groups remotely and monitor their transactions safely and transparently on their mobile phones. This is an improvement from the traditional paper-based process, which was time consuming. The groups still meet, but their meetings are faster and more efficient since more people transfer money digitally and less time is spent recording transactions manually. The project has reached 1,540 saving groups to date.

13 The Kubaka Ubushobozi Hifashishijwe Ikoranabuhanga consortium (KUHI), Kinyarwanda for "empowerment through mobile technology".



"In 2019 GSMA's M4H programme facilitated a partnership between Telesom and CARE Somaliland to further understand the opportunity for mobile-enabled digital identity solutions for cash-based assistance via mobile money payments in Somaliland.

With the support of the GSMA, in 2020, Telesom developed a real time voice verification platform that has improved the verification of the beneficiaries with real time reporting mechanisms while preserving the safety of the recipients as they receive their payment in a dignified manner."

Telesom, Somaliland

4. Growing the digital ecosystem – demonstrating how service users are using the technology to improve their livelihoods or how the project can help them use technology more effectively

Lack of access to energy to charge mobile phones is one of the key challenges in growing a digital ecosystem. The M4H programme has supported Alight, an international NGO, and Meshpower, a minigrid provider, to deploy solar-powered mobile-charging kiosks across Mahama Refugee Camp in Rwanda. People in the community will be able to use mobile money to pay to charge their phones at these kiosks.

Mobile money agents are essential to the digital ecosystem, and this year M4H signed an agreement to digitise the Humanitarian Code of Conduct and Protection from Sexual Exploitation programme, which offers training to agents to improve their services to people in need of humanitarian assistance. This programme was successfully implemented in Rwanda in 2019. The digital version is being piloted in Uganda and will then be replicated and scaled to other countries.

The year ahead

In the year ahead, the programme will expand its geographical focus inding opportunities to replicate and scale projects. The M4H team will gather key findings and lessons from their work so far, to ensure that the programme continues to engage with stakeholders and partners that are helping to achieve the M4H mission of accelerating digital humanitarian assistance.

"The GSMA speaks our language. Their commitment to scaling up digital humanitarian assistance through mobile technology brings huge value to WFP and the Emergency Telecommunications Cluster (ETC), which we lead. This kind of collaboration is essential for saving and changing the lives of the people who need us most."

Enrica Porcari, Chief Information Officer and Director Technology Division at UN World Food Programme (WFP)



Policy and advocacy

The M4H's policy and advocacy work continued to meet the programme's overarching objective to promote more enabling policy environments that support the delivery of digital humanitarian aid. This was achieved through the following activities:

- Researching, identifying and addressing regulatory/policy barriers facing M4H partners;
- Developing and disseminating relevant advocacy positions at local, regional and global levels; and
- Building the capacity of policymakers in selected countries through the programme's "Responding to Disasters and Humanitarian Crises" course, and supporting them in developing National Emergency Telecommunications (NET) Plans.

Recommendations to address policy barriers

To ensure that the mobile industry could play a vital role in responding to the COVID-19 pandemic, particularly in humanitarian contexts, the M4H team focused efforts on raising awareness of the need for enabling policy environments and offering recommendations for positive policy change. For example, policy and regulatory recommendations[14] were developed for governments and humanitarian actors to help facilitate mobile money-enabled delivery of humanitarian and social assistance in the context of COVID-19. The programme also provided timely information on regulatory outlooks in Africa and Asia, supporting the work of FCDO and its partners on the SPACE initiative.

The M4H team collaborated with UNHCR and Safaricom to co-author an article on how governments can help mobile phones become a humanitarian lifeline.[15] Published by the World Economic Forum, the article recommended policy measures that regulators could consider to empower the mobile industry in the fight against COVID-19.

In April 2020, in partnership with the Somali Cash Working Group, the M4H programme commissioned a study of cash transfers in South-Central, Puntland and Somaliland regions to more closely align and maximise the potential of mobile money for humanitarian assistance. The team shaped the development of process maps and guideline documents for implementing agencies.

Finally, building on 2019 joint research with UNHCR on the legal and regulatory barriers refugees face in accessing mobile services, the M4H programme supported the expansion of Displaced and Disconnected research to cover South American countries. It also promoted multistakeholder dialogues between cash working groups and MNOs across Latin America, including on the Venezuelan migration and refugee crisis. In October, in partnership with UNHCR, M4H launched the Mobile Stories / Historias Móviles participatory storytelling project, in which Venezuelan refugees and migrants in Barranquilla, Colombia, were asked to explain the importance of mobile connectivity in their lives. They shared their stories using the medium of their choice, with control over creative direction and narrative.

14 Theodoru, Y. (4 May 2020), "Policy and regulatory recommendations to facilitate the role of mobile in humanitarian assistance in a COVID-19 world", Mobile for Development Blog.
15 Theodoru, Y., Chege, S. and Warnes, J. (13 August 2020), "Here's how governments can help mobile phones become a humanitarian lifeline", World Economic Forum.

Local and global advocacy

One of the team's major successes was a policy relaxation that unlocked access to mobile services for a vulnerable group in Kenya. By engaging regulatory bodies in Kenya, the team secured the green light for a mobile-enabled digital ID project. The project is being implemented by the Kenya Red Cross Society and involves creating digital IDs for a population without recognised identification in Kenya to enable them to receive humanitarian cash assistance. Following the team's engagement with Kenya's Communications Authority and KRCS, the regulator approved the purchase of SIM cards for programme recipients who did not have national IDs.

At a global level, M4H continued its work with the ITU Emergency Telecommunications Division, providing input to their Guide to develop a telecommunications/ICT contingency plan for a pandemic response. Published in August 2020, the guide outlines a set of recommendations aimed at ITU member countries to ensure network continuity and service delivery during health-related emergencies.

The M4H Advocacy team is leveraging its new partnership with Mercy Corps to identify global opportunities for joint advocacy to address local and regional regulatory challenges. As with all M4H advocacy initiatives to create enabling policy environments for digitalising humanitarian assistance, the team works closely with GSMA members and a broad set of stakeholders and partners to reach consensus on common positions and regulatory recommendations.

Building the capacity of policymakers and governments

M4H delivered the capacity building course, "Responding to Disasters and Humanitarian Crises" on various platforms, including the ITU Academy, to over 150 policymakers representing over 16 countries,[16] as well as intergovernmental bodies, including The World Bank. As a follow up, Somalia's National Communications Authority requested support from M4H to review and provide input to their draft National Emergency Telecommunications Framework.

In support of the joint World Bank, ITU, the GSMA, and WEF COVID-19 Action Plan,[17] M4H co-hosted an industry-wide roundtable with the regulatory affairs teams of Bangladeshi MNOs. The M4H programme will support the Bangladesh Telecommunication Regulatory Commission (BTRC) to develop industry-conducive emergency telecommunications structures, an initiative aligned with the Action Plan.

16 These include Somalia, Ghana, Kenya, Nigeria, Lesotho and India.
17 GSMA (21 April 2020), The World Bank, WEF, GSMA and ITU Mobilized in the Fight Against COVID-19.



Looking to the future

In 2021/2022, the final year of this phase of the M4H programme, the focus will be on achieving the programme's vision to accelerate the delivery and impact of digital humanitarian assistance, and its goal to reach a cumulative seven million people with improved access to and use of mobile services in humanitarian contexts.

As the humanitarian landscape continues to change in response to the shifting nature of crises and funding patterns, it is clear that the humanitarian sector will increasingly rely on mobile operators, the wider private sector and governments to help deliver impactful services for recipients and advance technological shifts through policy innovations.

In a year of uncertainties, mobile technology has remained essential and proven crucial. This has heightened demand for, and demonstrated the relevance of, the M4H programme's expertise, lessons and activities, and the team is more determined than ever, together with the programme's incredible partners, to continue to advance digital inclusion for those who need it most.

Please get in touch if you are interested in joining M4H to achieve this mission by contacting us at m4h@gsma.com

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