

2020 will be remembered around the world as a challenging year, yet for many people, long troubled by humanitarian crises, it may not have seemed so very different. That's why, as soon as we saw that COVID-19 was going to land heavily, we kept aware that, whilst MapAction would need to adapt, acute humanitarian challenges would continue, and our maps, analysis and tools would still be required.

Our challenge would remain how best to use the geospatial and data capacity of our team for optimal humanitarian outcomes, during this pandemic period and beyond.

What did we do...?

We redefined our technical offer – We developed several organisation-wide technical innovations...

Developments that included a range of new remote project management systems, years ahead of schedule.

With multiple new systems, contexts and partners emerging, -

Training and Support for the wider MapAction team was critical. This also, needed adaptation to a virtualized environment.

Our support action has already contributed to crises prediction and pre-emptive action taken, and will be another growth area for us.

Working alongside the UN Centre for Humanitarian Data enabled us to contribute innovatively across several aspects of the global pandemic response, and we have now started to increase our volunteer capacity in this area.

2020 - MAPACTION'S BUSIEST YEAR TO DATE

- 43 missions and support projects
- 11 anticipatory action, preparedness and training projects
- 32 response missions
- 23 projects relating to COVID-19
- 5 team-member secondments to partners
- 2 major data preparedness & mapping automation milestones
- 547.5 team training days

HOW DID WE MADE A DIFFERENCE

EMERGENCY RESPONSE

In a year when COVID-19 caused rapidly evolving, multi-layered and life-threatening humanitarian challenges, the scope, scale and configuration of the assistance needed from MapAction required innovation. Organisations everywhere needed urgent help to understand the impacts of the coronavirus to react effectively.

The deal with unprecedented volume of requests for assistance we received as the pandemic took hold, and to apply our resources where they would be most impactful, we established **a global COVID-19 online Help Centre in April 2020.**

In total, we provided emergency-response support 32 times in 2020. Thirty of these missions were conducted remotely (by teams of people working from home). Several lasted for several months. More unusually, five team members were seconded to provide dedicated support to partners and countries for similar periods.

UNDERSTANDING WHAT WAS NEEDED

Part of the value MapAction provided in 2020 was in helping partners clarify their support needs when faced with novel and formidable circumstances. Our explicit focus on this vital soft skill during our team training over many years was invaluable, as was the experience of previous epidemics such as the 2014 Ebola outbreak.

We helped to rapidly design and implement new information systems, for example, to support frontline health workers worldwide or to ensure the needs of the most vulnerable were met.

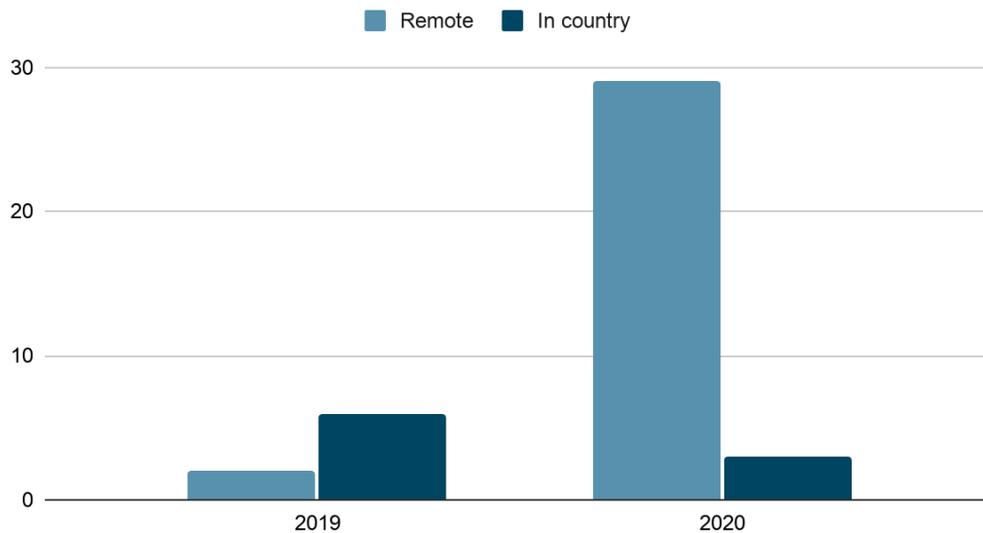
BEYOND COVID

While COVID grabbed most of the headlines in 2020, sadly it didn't mean other disasters went away, and they were often exacerbated by the pandemic.

- Large parts of Africa faced the combined impacts of locust swarms, floods and drought, causing wide-ranging food insecurity.
- An influx of refugees into Northwest Syria and Turkey early in the year put strain on the humanitarian networks attempting to support them.
- In Beirut, an enormous explosion devastated the main port and part of the city.
- And Central America was hit by two powerful and destructive hurricanes in quick succession in December, causing flooding and landslides across the region.

In every case Mapaction provided support, the coronavirus complicated the situation for humanitarian responders, but our role continued in helping analyse the scope of the emergencies and aid decision making.

Emergency responses



EMERGENCY RESPONSES VIRTUAL AND OTHER SUPPORT.

HELPING HURRICANE SURVIVORS IN CENTRAL AMERICA

When two catastrophic hurricanes, Eta and Iota, hit Central America in a single fortnight in November 2020, MapAction had already been working for several months with the UN's Latin America and Caribbean Office (ROLAC) for the Coordination of Humanitarian Affairs (OCHA) to respond to a higher case load caused by COVID-19 and prepare the region for hurricane season. This enabled us to provide vital early support when high winds and torrential rains caused cataclysmic flooding and landslides in Guatemala, Nicaragua, Honduras and El Salvador.

Extracting data from aerial surveys and other sources, we mapped thousands of locations, pinpointing cut-off communities and identifying those at risk of further hazards. Through a combination of long-term collaboration, rapid in-country emergency response and sustained remote support, MapAction played a critical role in the response across the whole region, as well as improving in country systems for the long term.

GETTING AID TO SYRIAN REFUGEES

In March 2020, MapAction was asked by the UN's Office for the Coordination of Humanitarian Affairs (OCHA) to help humanitarian teams in Turkey and Northwest Syria. Almost one million people – 60% of them children – had recently arrived in the region as a result of an upsurge in fighting in Aleppo.

With the added threat of COVID-19 looming, humanitarian organisations needed to rapidly ascertain the location, size and status of around 1,000 temporary and long-term encampments to ensure people had enough food, water, shelter and access to sanitation, healthcare and other essential services.

Camp data was collected by people with varying levels of training, network connectivity etc.

Working remotely due to lockdown restrictions, MapAction created tools and cloud-based solutions and portals to clean the data, creating a 'single source of truth' for humanitarian teams to coordinate their activities and those of agencies on the ground.

The tools we created saved up to 70% of the time usually taken to clean and assess camp location data, which sped up the delivery of aid to people in need.

PREVENTING FOOD SHORTAGES IN ETHIOPIA

In 2020, Mapaction was part of a UN Team to test an early-warning system for drought-related food insecurity, particularly in Ethiopia and Somalia. This consists of a series of indicators designed to trigger the release of funding so that pre-cursor action can be taken to avoid major food shortages.

PROTECTING HEALTH WORKERS DURING COVID-19

The number of security incidents affecting healthcare workers has increased due to the COVID-19 pandemic. These included the arson of testing facilities, the targeting of health workers on their way home from clinics, and violent responses to mask requirements worldwide.

MapAction and Insecurity Insight, a non-profit which works to examine threats facing those living and working in dangerous environments, collaborated to create an interactive web map that provides a summary of the number of incidents by country and type and how they affect health workers.

The aim was to support humanitarian decision making, and protect the safety of healthcare workers.

These were some of the major activities, **with the focus being on a transition to remote mechanisms for humanitarian support via new technology, online and cloud-based solutions and remote management systems.**

SUPPORTING LOCAL AND REGIONAL NETWORKS AND ORGANISATIONS

We developed a new relationship with the Asian Disaster Risk Reduction Network (ADRRN), a group of 46 NGOs in 20 countries across the Asia Pacific region. We're helping ADRRN develop and maintain a knowledge-sharing platform for its members and a community of interest to solve problems together. We're also working with the Myanmar Community Development Association (CDA) to support operations by mapping their activities.

We supported the Capacity for Disaster Reduction Initiative (CADRI), a global partnership of 20 organisations focused on reducing climate and disaster risk, to develop a digital assessment tool for assessing national and local preparedness and capacity to adapt to climate change.

We helped our regional partner the Caribbean Disaster Emergency Management Agency (CDEMA) to design and build the Caribbean Risk Information System (CRIS), an important new online platform for geospatial data, disaster risk management and climate change adaptation information.

PLUGGING THE GAPS

A major programme of work, referred to internally as our 'Moonshot,' shifts the focus from reactive to proactive data sourcing and map production. Our aim is to prepare good quality data so we can provide the best maps possible even faster than before, in order to facilitate the most effective humanitarian responses – not just the best maps given the prevailing circumstances in the midst of a humanitarian emergency.

TECHNICAL INNOVATION

Since MapAction first started to offer disaster mapping in 2003, many other humanitarian organisations have also started to use geospatial tools and develop their mapping capacities. We actively support this, but we see an urgency to do more.

Modern data science opens up great possibilities for anticipating different types of disasters and modelling their likely scope, geographic spread and impacts in order to trigger preventative measures and reduce or avoid negative outcomes. There is a growing and welcome shift across the sector from responsive to anticipatory humanitarian action.

ONLINE APPROACHES

MapAction has long provided remote support to partners to help them prepare for and respond to different types of emergencies, alongside and underpinning the in-country services we offer. In recent years, we have been expanding this approach with the creation of, for example, web mapping tools, information dashboards, and blended and fully online humanitarian mapping courses. However, COVID-19 accelerated this paradigm shift, with remote, online collaboration becoming the dominant approach for all our services and many of our internal operating procedures, as well as our team training.

The establishment in April 2020 of our online Help Centre for COVID-19, supported by an agile approach to project management based on the Jira platform, is a good example of this. The Help Centre provides an easy-to-use entry point for organisations of all kinds to ask for our assistance, and access datasets and support.

OUR PLANS FOR 2021 AND BEYOND

The compound impacts of COVID-19, climate change and economic insecurity mean the scale of humanitarian need around the world - and associated demand for geospatial information - are only set to increase. We're scaling and strengthening our activities to meet the challenge.

As well as continuing to give our existing partners the help they rely on us to provide, whenever, wherever and however they need it, we are developing new projects, relationships and networks in areas where we see a need and an opportunity to add value. Among other things:

- We're collaborating with GIS specialists across the humanitarian sector to put in place the right supports for the global rollout of COVID-19 vaccines.
- We're partnering with academia to test approaches to predicting, preparing for and averting disasters.
- We're working with partners to ensure data is used responsibly by advocating for change at country level on data availability, interoperability, ethics and standards.
- Through the Asian Disaster Risk Reduction Network, we're strengthening information management and knowledge sharing and developing our collective understanding how disasters impact cities.

Internally, we're adapting and evolving how we work to bolster and extend the services we provide. This includes:

- Continuing to develop tools to automatically detect and address quality issues in data we know is needed in most humanitarian emergencies.
- Automating the production of core maps that give humanitarian coordinators the information they need immediately, freeing up GIS specialists for the mapping tasks that only humans can do.
- Exploring how the needs of women and girls are represented in humanitarian mapping and investigating missing data that could help us understand their unique vulnerabilities, as well as other at-risk groups such as young men in conflict situations.

- Ensuring that all our geospatial products and services are technically bilingual to maximise their accessibility and relevance.
- Redeveloping our website and the resources available through it.

To deliver on all these undertakings and more, we are sharing the expertise we have within our team and expanding it to our partner humanitarian agencies by combining, sharing and decentralising our technical tools and building in accountability and learning into everything we do.

Thank You.