

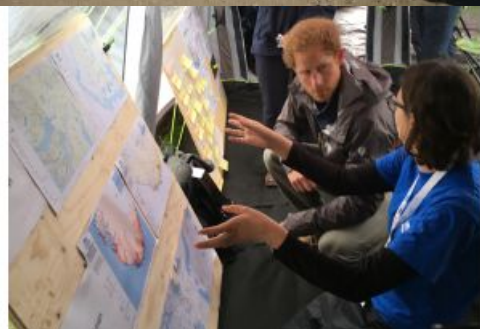
# VOLUNTEERS WORKING WITH GEOSPATIAL INFORMATION TO UPDATE MAPS

## MapAction Brings Response to Disasters



MapAction is a leading humanitarian mapping charity that works through skilled volunteers. Its purpose is to provide rapid, on-the-ground mapping to humanitarian aid agencies, in response to a disaster or crisis to help save lives and minimise suffering. Since it was established in 2002, it has responded to 76 humanitarian emergencies which have impacted on the lives of tens of millions of people.

The charity is an essential part of a well-developed humanitarian programme responding in complex emergencies such as earthquakes, volcanoes,



floods or tsunamis. Local communities are the first responders, national governments carry responsibility for action, local support systems can be activated, but international organisations such as the United Nations' Office for the Coordination of Humanitarian Affairs (UNOCHA) can also be called on (it is in this third area that MapAction usually operates). Whilst located in the UK, MapAction has a global reach with a small section of volunteers based in the Caribbean and representatives in New Zealand, Australia and the Middle East. In addition to its work with OCHA, the charity also works closely with the World Food Programme in Asia Pacific and with UNICEF in West Africa. It is also working increasingly with regional organisations such as the Association of South East Asian Nations (ASEAN)'s Humanitarian Assistance Centre (AHA).

The rationale and purpose for the creation of MapAction was to answer a few critical questions posed by the responding aid agencies. The provision of real-time mapping data to assess the scale and scope of the disaster and to identify areas most affected where the population is most vulnerable remain its principal purpose. Ultimately the goal is to enable aid resources to be used as effectively as possible and maximise the benefit to affected communities so their recovery can begin as quickly as possible.

When disaster strikes, people's lives can be destroyed within a matter of seconds. The challenge for the aid agencies is to know where to start. Within hours of an alert, MapAction mobilises a team of highly skilled volunteers to map the needs of those affected and help coordinate the response. Its aim is to help the aid agencies, usually through OCHA, to get aid to the right places quickly, so lives can be saved and suffering minimised. As the situation on the ground evolves, MapAction's analysis helps responders understand the changing needs of survivors, who may have been displaced by the crisis. The mapping is used to coordinate relief work and target relief (food, water, medical supplies) as effectively as possible. The mapping service helps responders understand the extent of the emergency i.e. who is doing what, where and how they can use their resources most effectively. The mapping essentially provides the glue which binds together the entire humanitarian response and ensures the

sound disposition and deployment of those other resources.

MapAction usually deploys an initial 2-3 person team, sometimes up to 5, in less than 48 hours, for up to a 2-week deployment. Examples of volunteer deployments include both slow and sudden onset disasters, as well as complex conflict and population movements, of which the following are a few examples:

- The ebola outbreak in West Africa;
- Flooding disasters on 4 continents, the most recent of which was Peru;
- Earthquakes (e.g. Haiti and Nepal)
- Volcanoes (e.g. Indonesia)
- Tsunamis (e.g. Sri Lanka, Japan)
- Conflict (e.g. Syria)
- Post-conflict (e.g. Sri Lanka)

In a natural disaster, the situation is generally one of recovery. MapAction's experience in Nepal exemplifies this and the type of mapping needed. Immediately following the earthquake, reported deaths were used as a proxy to identify the worst affected areas and building damage was used as a proxy of vulnerability and impact. This sort of mapping provides a basis for a plan, where best to target assessments and where the most vulnerable might be in the earliest days. It enables a forward direction of the delivery of assistance, although always requiring care to ensure that the situation is kept under review as new information emerges and the picture of vulnerability and unmet needs becomes better understood. The mapping has to reflect the emerging information and this is where GIS techniques come into their own.

MapAction has 13 salaried individuals at their HQ headed by a Chief Executive and complemented by 12 trustees and several other non-technical members. It is a uniquely volunteer-driven charity with some 85 volunteers, all of whom are supported by their employer in both the public and private sectors. All the volunteers are highly skilled GIS technology professionals in their day job: additional training in the nature of humanitarian relief work is provided. The selection process is rigorous and, to date, the charity counts itself fortunate in having more applicants than it needs. Over half the volunteers are on 24-hour standby to leave their jobs and families to deploy to an emergency. All the volunteers have arrangements with their employers so that, within limits, they can deploy at minimal notice. The volunteer pool is regularly refreshed and certainly at least annually.

Donors play a critical role each year in helping the charity raise approximately £1M in addition to the funding it receives from several institutions, including the UK Government's Department for International Development (DfID) and the Netherlands' Government, to ensure it can respond each time it is called on. Money is raised through arranging community events, encouraging regular gift-aided donations, through emergency appeals; and two of the charity's own volunteers ran the Marathon de Sable in May 2017 and a number of their volunteers ran in the London Marathon. Ambassadors and advocates help to raise the charity's profile through their own professional and social networks. They seek to attract and engage other supporters and benefactors. MapAction is privileged to have HRH Prince Harry as its Royal Patron.

*This article was published in GIS Professional October 2017*

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<https://www.gim-international.com/content/article/mapaction-brings-response-to-disasters>

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