

△ Map drawing made by children living in Asia
(They see the world together)

▽ Example of a map drawing using various motifs
such as animals (Preserve Earth for the future
generations!)



© Gabriella Fink/ICA (2003)

Teachers and cartographers agree that it is more important to develop the abilities needed to read, understand and make practical use of maps than just learning or memorizing concepts.

Many of the participants used maps to transmit a positive and optimistic message, reflecting that teachers enhance the values of global friendship and peace in their explanations. Other children, mainly in older age groups, preferred to draw a less idealized message, illustrating in a general sense the real situation of the world today.

Interesting details are also revealed when seeing their works: we can notice the differences between the map drawings made by a child from Europe or America who uses world maps with the most traditional location of continents and a child from Asia or Australia who makes maps using a different distribution of the continents in the interest of representing their country or regions nearest to themselves while, at the same time, placing their country approximately in the centre of the world map they have created.

These changes in the location of continents can be considered a positive element testifying that there is not only one global rigid approach when drawing a world map: each country can adapt the general principles for the cartographic visualization of the world according to the content and aims of their educational systems.

Children place their maps into an artistic environment, filling them with very detailed graphics or surprisingly offering a very simple solution, e.g. making them in black and white. Some of them are decorated using national folk motifs, while others use modern or internationally recognizable symbols.

Apart from these “regional” differences, all the map drawings have a common message inspiring and compelling us: their hope and confidence that the world of the future must be fairer, ensuring equal rights for all the people in their countries. 🏠



Digital Maps for Humanitarian Need

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Just only a decade ago, a lot of advocacy was still necessary to explain why spatial data matters and what maps could be used for.

At the time, using maps was still a niche conducted by a very few experts and Boy (or Girl) Scouts, although futurists started to predict that mapping would become mainstream and extremely important.

Times have changed, and today some even claim location to be the “new intelligence,” as the use of mobile mapping and location services has increased by 68 percent in 2012 alone.

These changes have been fuelled by the Internet, with digital mapping and interactive maps available at the user’s fingertips. At first only exploited to look up locations and directions, interfaces

like Google Maps or MapQuest have become more and more collaborative and have gained new functionalities.

Today’s humanitarian mapping landscape is uneven; new ground-breaking initiatives and tools appear at a high pace, a lot of new actors including volunteers and companies are knocking at the door to get involved, but at the same time, the “traditional” actors have difficulties integrating these new technologies and stakeholders.

Nevertheless, it is clear that maps are being used at a variety of operations in the humanitarian and other sectors including development, emergency, protracted crisis and early recovery to community development. But even more important is the fact that they have come to make their own maps.

Maps for Advocacy and Outreach

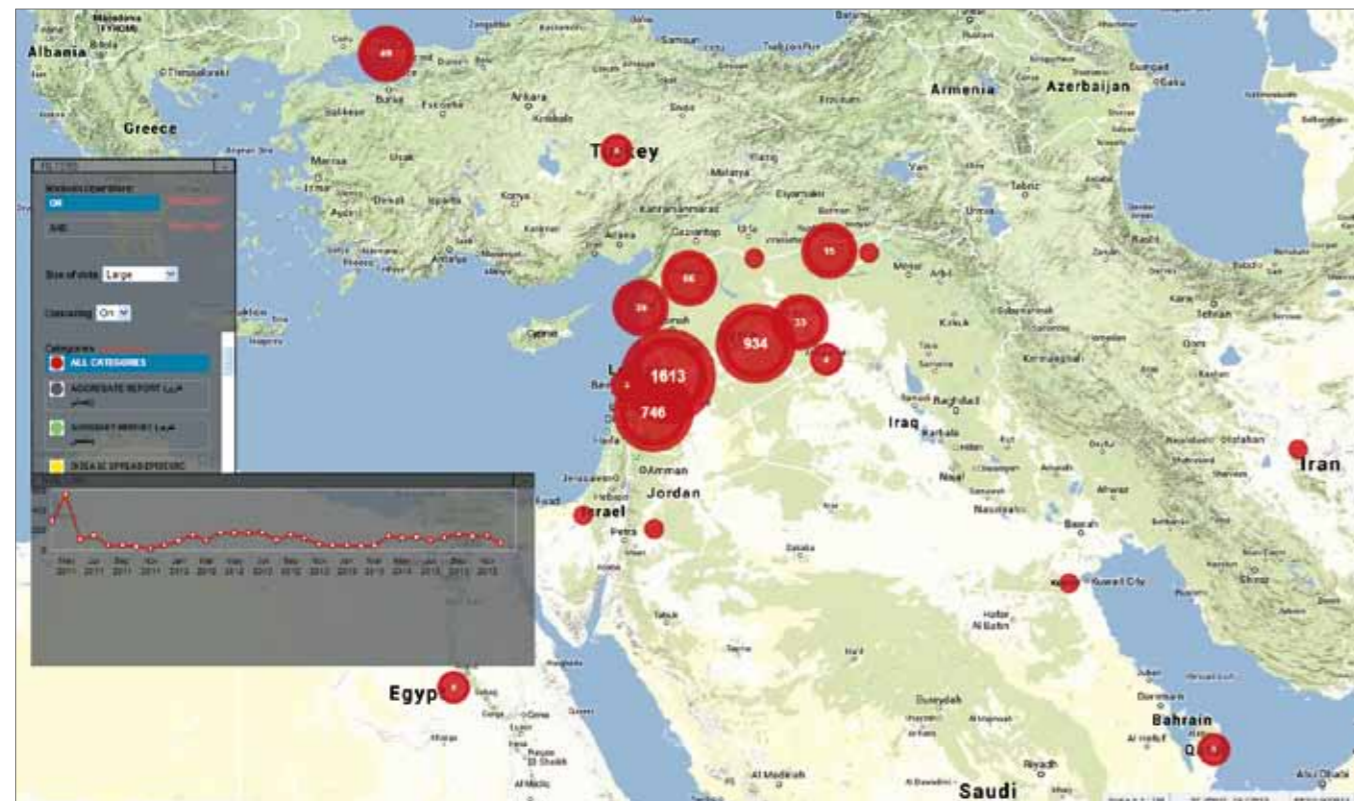
Our modern societies are increasingly demanding evidence-based justifications for decisions and policies, creating a strong demand for data. Maps—often together with charts—play an important role in advocacy and communication, since it is one of the most visually appealing ways of presenting complex spatial issues in the present digital era.

In the humanitarian sector, too, organizations and donors rarely publish a report or news item without furnishing a map of the situation.

One of the most famous examples of mapping-based advocacy is the *Ushahidi* (“testimony” in Swahili) platform. This software was created in 2008 in Kenya; facing censorship, human rights activists decided to collect testimonies on electoral violence. The system aggregates information from text messages, emails and social networks and displays them on a web map.

Ushahidi has been reused in a large set of situations including election monitoring, disaster response and political advocacy. Today, it can also be deployed as an easy-to-set-up online platform called Crowdmapping, which allows civil society actors to start their own mapping system to advocate their cause. SyriaTracker is an example platform that aggregates 4,000 reports on casualties, missing and arrested persons and chemical attacks, collecting eyewitness testimonies, multimedia files and press reports. It, therefore, offers a unique evidence-based database of human rights

▷ Screenshot of the SyriaTracker Map



© Humanitarian Tracker/Syria Tracker

violations in Syria.

Maps for Coordination

Mapping is also a major tool for the coordination of humanitarian response. They are often used for the 3W (“Who does What Where”) assessments of different actors working in a crisis situation.

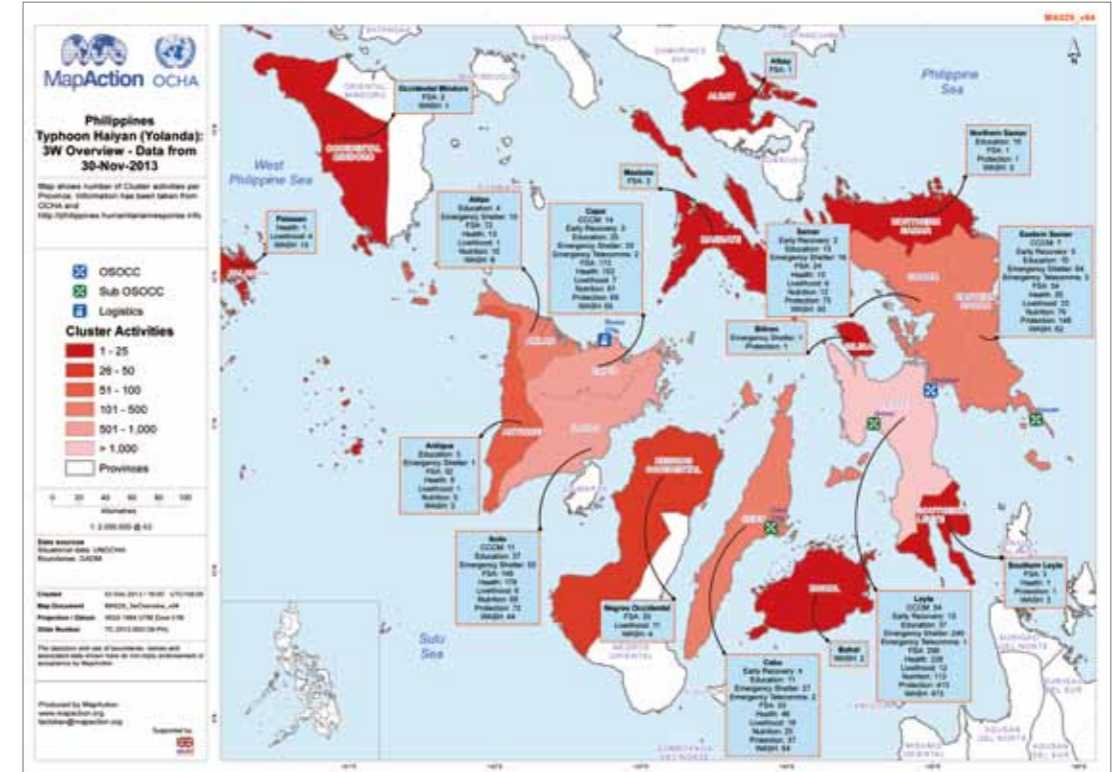
Most major coordination organizations provide mapping information as one of their key deliveries, like the UN Office for the Coordination of Humanitarian Affairs (OCHA), through the ReliefWeb website, but also through the various global and country clusters.

With the development of crowdsourcing, each major disaster has its online coordination map, sometimes even several—highlighting the need for coordination within coordination efforts.

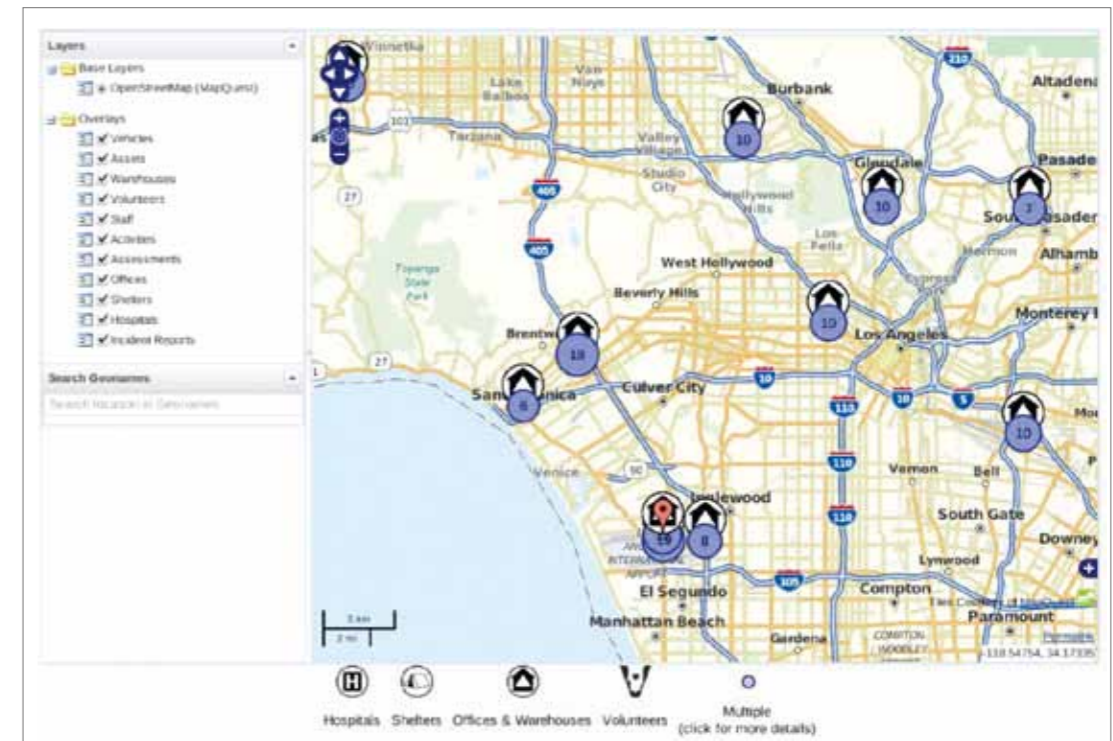
Specific software can also be set up for a crisis in particular. For example, a mapping and information-management platform for the coordination in emergencies can better mitigate, prepare for, respond to and recover from disasters. The key challenge for this coordination aspect remains the sharing of data—in terms of licensing, safety and privacy, and technical compatibility.

Maps for Decision Making

Mapping is also extremely useful for decision-making; in fact,



© OCHA/ReliefWeb



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△ A 3W overview for Typhoon Haiyan response

▽ Screenshot of Sahana's Eden platform

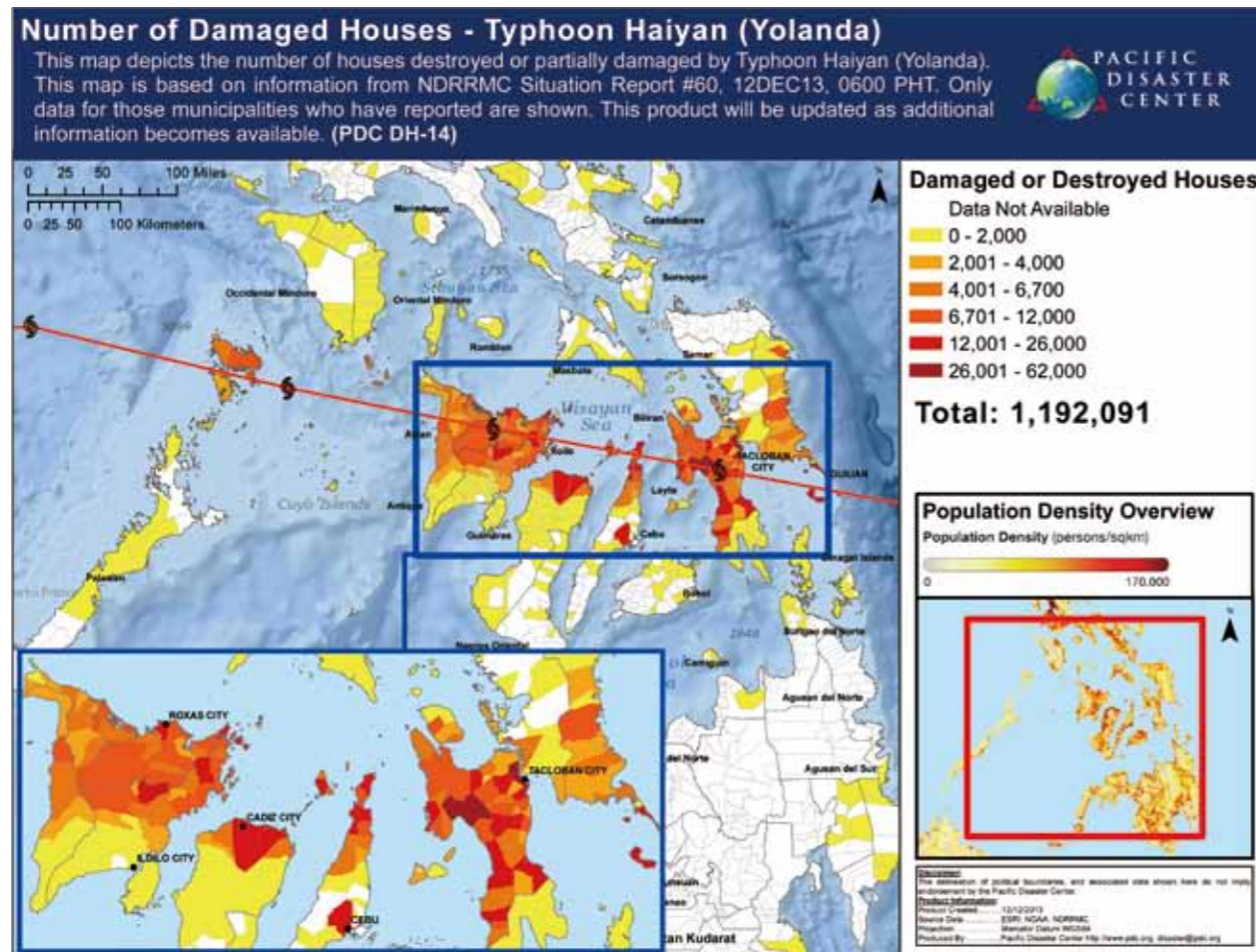
most of the data used today in the humanitarian sector have a geographic dimension.

The UN Common and Fundamental Operational Datasets (COD-FOD), for instance, includes a basic topographic map, damage assessment through satellite imagery just after a disaster, location information on infrastructure and services, and

socioeconomic dataset.

Geographical Information Systems (GIS) offer a unique way to aggregate various layers of data into an easily understandable synthesis—the map helps turn data into information.

This recent example is a map of damaged houses on the path of the typhoon Haiyan. It shows instantaneously which areas are in



Map by the Pacific Disaster Center showing the number of damaged houses due to the Typhoon Haiyan

most need of emergency shelters, allowing NGOs and international organizations to efficiently dispatch their supplies. It will then also be useful in the early recovery process including the distribution of construction materials and later as the reconstruction starts.

Source of Information

During emergencies, organizations rely on information shared by other organizations as well as volunteers helping to collect it. There are, however, two very different types of input for this crowdsourcing.

• Digital Volunteers

Digital volunteers, whether spontaneous or based on a request from an organization, usually get involved after an epic disaster where they feel they can contribute and assist—they follow the general rules of crowdsourcing, with clear instructions on what to map.

The largest movement of spontaneous data collection, founded in 2004 and today hosting a whopping one million registered users,

is undoubtedly the free and open source database Open Street Map (OSM).

After a big operation during the Haiti earthquake in 2010 that helped organizations on the ground to get an idea of the street layout in Port-au-Prince and plan their logistics, a Humanitarian Open Street Map Team (HOT) was created and has been assisting in multiple emergency deployments.

CartONG and any organization working in mapping today will either harvest or contribute to OSM data for

any map created, which demonstrates the power collaborative approaches have today.

There has been a major shift, and many efforts have been made to research the effectiveness, pilot digital volunteers in emergencies and improve their collaboration with traditional humanitarian organizations. Several initiatives have been created, most of them grouped in the Digital Humanitarian Network, which can now be directly activated by humanitarian organizations.

The potentials and benefits of using digital mapping platforms to promote Education for International Understanding are vast and will continue to grow. They fulfill an important role of educating the public in an interactive fashion and are increasingly deployed for collaborative participatory mapping by civil society. . .



Map of Tacloban City (Leyte Island) on the Open Street Map platform before and after being struck by the typhoon

• Affected Populations

Mapping by citizens is another source of information—extremely valuable, as it allows the affected population to directly provide information and consequently measure the efficiency of humanitarian assistance.

The Danish Refugee Council (DRC), for instance, combined it with an SMS system to build an interactive feedback platform for its interventions in Somalia. It allows direct and transparent communication between the NGO and its beneficiaries. The project is linked with an open mapping platform presenting all the DRC projects interventions in Somalia with budgets and reporting made public.

New mapping technologies, if used sensibly, can be powerful tools to enhance the accountability and transparency of humanitarian action. But this approach still remains essentially “top-down,” with beneficiaries only consulted to validate (or not) a project during the implementation, and almost never during the elaboration phase. This is why crowdsourcing should not only be the delegation of production of data, but a way to open the discussion between multiple equal stakeholders, including local communities themselves—increasingly acknowledged as a key actor in the rescue and relief effort.

Collaborative Mapping Platforms?

Mapping platforms are often used as the central point for humanitarian information and communication technologies.

With all the success stories one hears of, one must still mention that there are reasons and situations where it has not been thought of enough for it to be really effective and sustainable. The most

obvious example concerns the duplicating of an already existing effort. For instance, for the last Kenyan election, no less than three Ushahidi-based mapping platforms and seven SMS services were established to monitor irregularities. And a recent study found that 93 percent of the 583 Crowdmeps had fewer than 10 reports, and 94 percent of Crowdmeps had only one user.

Setting up a successful digital mapping platform also implies being able to answer all queries; if not, it can be at the least disappointing (for collaborators and beneficiaries) and at worst truly dangerous (if responding beneficiaries rely on the tool to meet their needs).

The potentials and benefits of using digital mapping platforms to promote Education for International Understanding are vast and will continue to grow. They fulfill an important role of educating the public in an interactive fashion and are increasingly deployed for collaborative participatory mapping by civil society; thus, creating an understanding between communities and actors. With increased knowledge, education and access to information, and with this awareness of the collaborative spirit that has brought help through different crisis and disasters (that has come from individuals all around the world with no interest save the humanist aim of increasing the well-being of people going through a difficult time), we can trust that a context of mutual reliance and belonging can also diffuse itself over time between communities and countries, which can hopefully lead to a more peaceful world context.

* CartONG is a young NGO that works to provide mapping services for humanitarian organizations and promote the use of Geographic Information Systems (<http://www.cartong.org>).