After Action Report

Nepal Earthquakes

(source: CNN)

August 26, 2015
Introduction

On April 25, 2015, Nepal was hit by a shallow magnitude 7.8 earthquake centered 34 km ESE of Lamjung District. Called the Gorkha earthquake, it killed over 8,800 people and destroyed nearly 600,000 houses in rural districts near the epicenter and in the capital city of Kathmandu (UNOCHA). It also caused an avalanche on Mount Everest that killed at least 20 people and injured 120 (Washington Post) and a mudslide in the Langtag Valley where at least 250 people were reported missing (Associated Press).

On May 12, a large 7.3 magnitude aftershock, called the Dolakha quake, struck the region killing more than 200 and injuring more than 2,500 people in Nepal (CNN) and killing at least 17 people in India and one person in Tibet (CNN). Daily aftershocks, combined with monsoon rains, have created landslides and flooding resulting in more and more people becoming internally displaced. Hundreds of thousands of people are currently living in temporary shelters, and about 2.8 million require humanitarian assistance (UNOCHA).

Humanity Road’s (HR’s) overall disaster response activities began on April 25th and ended on June 12th. In addition to producing general daily situation reports and conducting social media monitoring and amplification, HR was activated for five mission-specific projects.

List of Activations for Nepal:

1. Humanity Road Disaster Response: April 25-June 12, 2015 (49 days).
2. Activation to support Kathmandu Living Labs (KLL), QuakeMap crisis-mapping and urgent needs coordination - April 28-June 12, 2015 (46 days).
3. Activation to support Americas for Hospitals and Medical needs - May 1-4, 2015 (4 days).
4. Activation to provide assistance for stranded hikers - April 26-30, 2015 (5 days).
5. Activation to provide research for a water purification project - May 7-9, 2015 (2 days).
6. Activation to assess impacts to the location of the 2014 Sun Koshi landslide - May 12, 2015 (1 day).
Below is a summary of each activation followed by a summary of lessons learned.

**Activation One - Humanity Road Response**

Humanity Road volunteers self-activated on April 25, 2015 immediately following the magnitude 7.8 Gorkha earthquake.

**Goals and Objectives:**

The Disaster Response objectives were to:

- amplify official information to enhance public awareness; information included emergency and information hotlines, areas most impacted, status of communications, status of airports, roads, basic needs, shelters, embassies, animal needs, status of hospitals, etc.
- search for impacts and urgent needs using social media and the Internet.
- connect communities and individuals with needs to relief organizations in the field.
- publish and share situation and other reports on appropriate platforms in a timely manner.
- to support partners with research and/or special reports if needed.

The Process Improvement objectives were to:

- continue testing Scanigo as a twitter aggregation tool for data-mining.
- continue testing the use of surge support teams for mission specific goals.

**Surge Support and Collaboration Partners:**

- **Translators without Borders (TWB):** Humanity Road requested help from TWB, which provided translators fluent in local Nepal languages, geography, and culture. These volunteers translated documents and social media posts and searched for urgent needs and situational awareness information.
- **Standby Task Force (SBTF):** SBTF representatives were included in a Skype collaboration window that included TWB and HR volunteers. They brought urgent needs to the window and worked with the HR/TWB team to find solutions.
Reports:

A total of 12 Situation Reports for Nepal were published. The first report, published on April 25, included links to government websites, emergency numbers, official social media accounts reporting on the event, hospital information, utility company contacts, and information on transportation infrastructure. The following 11 daily Summary Situation Reports, published between April 26 and May 5, focused on communities in need, medical and hospital needs, communications and power, aid coordination, and resources for animals. Following the Dolakha earthquake of May 12, we also published a Situation Report on India.

The situation reports were published on Humanity Road’s website, ReliefWeb, the All Partners Access Network (APAN), HumanitarianResponse.info, and were shared directly via email with NGOs, including Americares and Nethope, Cisco TACops and the Microsoft Disaster Team.

Activation Two - Kathmandu Living Labs Crisis Map Support

On April 29, 2015 Humanity Road began providing crisis map support for Kathmandu Living Labs (KLL). The crisis map, located at www.Quakemap.org, was an initiative led by KLL with onsite coordination support from www.NepalMonitor.org and remote support from HR. The goal of the crisis map was to match the needs of people in the impact zone with relief organizations on the ground. As of May 18, over 1,800 reports had been processed and routed to more than 50 military and civilian aid organizations, and a total of 65,462 people from 89 countries had visited the map.

Goals and Objectives:

Humanity Road focused on providing: surge support for overnight processing; support for incident processing; operational advice and lessons learned from previous crisis mapping projects; leveraging volunteer resources from HR, TWB, and spontaneous diaspora volunteers; and capturing lessons learned on the use of Ushahidi for routing or dispatch of incidents through resolution.
Surge Support Partners:

- **Translators without Borders (TWB):** TWB volunteers, who had been assisting HR since April 26, continued to assist with the KLL activation. They provided translations, searched for urgent needs to add to the Quakemap, and verified reports of needs by contacting people in Nepal.
- **Spontaneous Nepal and Diaspora Volunteers:** after receiving numerous new volunteer applications from Nepalis living inside and outside Nepal and wishing to help, we conducted “just-in-time” training for eight spontaneous volunteers to support our work with KLL.

Reports and Activities:

- Provided advice on categorization elements and public messaging on About page.
- Provided introductions and guidance on collaborating with UNOCHA clusters.
- Provided overnight support for admin tasks associated with the KLL map.
- Researched and updated coordinates for pending (unapproved) incidents.
- Reviewed pending comments and update approved incidents.
- Manually updated newly added crisis map field data such as location name.
- Provided daily 5:00am status reports on major overnight processing activities.

Activation Three - Hospital List

On May 1, 2015, Humanity Road received a request from **Americares** for a medical assessment. They had requested baseline hospital map data from the **World Health Organization (WHO)** for target districts, but the data they received was missing addresses and contact information.

Goals and Objectives:

1. Provide Americares with a medical assessment report for three districts in Nepal: Gorkha, Dhading and Sindhulpalchowk. Information was to include hospital status information, damaged items, medicine and durable goods, supply needs,
fuel and generator needs, medical staffing needs and other general status information that would assist medical supply aid providers responding to the disaster.

2. Identify any local urgent needs that may need follow up.

Surge Support Partners:

For this project, HR requested surge support from Montgomery County CERT (MCCERT). From May 2-3, MCCERT performed searches using Scanigo (Scanigo is a Twitter aggregation tool developed by Progeny Systems and being tested by Humanity Road).

Reports:

A report on hospital status for the three priority districts was provided to Americares. The report was also submitted to Nethope and to United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) for upload to the Humanitarian Data Exchange (HDX). In addition, the MCCERT team identified 41 urgent needs and relayed these to Humanity Road volunteers for possible submission to the KLL crisis map.

Activation Four - Assistance for Hikers

On April 26, Humanity Road was alerted to a request regarding two stranded American hikers on Mt. Everest. The hikers had a cell phone and had sent a text message to a contact requesting information on an evacuation plan back to Kathmandu. HR began conducting research to determine if any search and rescue teams could help and the status of airports and evacuation efforts in the area.

According to the Nepal Secretary at the Ministry of Culture, Tourism and Civil Aviation, 90 tourists were stuck at Camp 1 on Mt Everest, and 120 were stranded at Camp 2, due to a blockade of the trail after an icefall occurred above Base Camp. Injured tourists were being airlifted to Kathmandu via Pheriche and the rest via Lukla. HR posted two requests for information on the civil-military All Access Partners Network (APAN) asking...
for information on flights for non-injured foreign nationals stranded on Mt. Everest, but no responses were received.

An HR volunteer, who had previously hiked in Nepal, was able to provide geographical information to a contact for the hikers and assisted the person in understanding extraction efforts. On May 1, HR received confirmation that the hikers had reached Kathmandu safely.

**Activation Five - Water Purification System**

**Goals and Objectives:**

On May 6, Humanity Road was activated by a stakeholder organization to provide information on suitable locations in Nepal for testing a new water purification system. They requested a local point of contact to collaborate with and to assist in identifying potential locations for their deployment. The location needed a water source, no matter how contaminated (although less turbid is better than mud), and a population with unmet water needs.

**Reports:**

On May 7, a two person urgent needs task team from HR provided a comprehensive report with points of contacts, available phone numbers, and links to 15 suitable locations including coordinates. They also provided information to connect with Humanitarian OpenStreetMap in Nepal, Kathmandu Living Labs (KLL), and Nepal Monitor. By the time the stakeholder’s team was on the ground and checking into the Water, Sanitation, and Hygiene (WASH) cluster, they had our report in their hands.

To help assess the severity of each location, the HR team assigned a point system for each site using distinct characteristics of each location, including: population density, distance to water source, organizations present, and contact information if known. As a result, the client organization’s team was able to use the locations to pinpoint a definite location to put their water systems to use.
Activation Six - Sun Koshi Dam Research

Following the second magnitude 7.3 earthquake that struck on May 12, a member of the UK CHASE Operations Team posted a request in a Nepal coordination Skype window asking if there were impacts on the Sun Koshi Dam. A large landslide had occurred in 2014 near the dam. Humanity Road volunteers datamined in social media and on the Internet but did not find any emerging information about impacts to the dam or landslides. An update was providing to the CHASE team member.

Summary of Lessons Learned

In order to collect lessons learned, Humanity Road collected information from volunteers during the response and emailed surveys to volunteers and partners and stakeholders after the response. Surveys were developed with the help of Statistics without Borders (SWB) volunteers.

Summary:

1. HR has continued to improve its internal organization and volunteer coordination during responses and activations. This response revealed more training is needed on specific forms and reports and roles available to volunteers during events. An effort to further empower volunteers and improve our self-directed work team organization has already begun. It was also found that volunteers often feel they did not have enough work and are unsure whether HR has an impact.

2. Tracking information in Skype chat rooms continues to be an issue. HR will continue to work on improving project management by finding ways to better communicate instructions and tasks in other formats, such as the Event Workbook, so that important information is not lost in Skype chatter. Improved communication would also assist volunteers working in different time zones.

3. Efforts to continue to recruit and train international volunteers should continue as this allows us to have close to 24/7 coverage during responses. Volunteers in the Asia/Pacific region should also be trained to be event leaders in order to better provide coordination for events in the region.
4. HR’s team and skilled surge support partners are good at providing rapid assessment reports that contain points of contact and coordinates for specific aid deployments.

5. Overall, volunteers and partners agreed HR’s situation reports were successful, well sourced, and should continue. It has been suggested that more maps be added to the reports. Daily reports are preferred and should be published in either PDF or Excel formats. Separate reports rather than one long continuous report are more efficient and less confusing.

6. Local contacts and digital contacts should be identified and relationships nurtured before a disaster occurs. Contact information for major infrastructure (hospitals, airports, police, fire, etc) should be collected and updated prior to a disaster though it is likely that contact will be difficult immediately following an event.

7. In the immediate aftermath of a disaster event, reliable information can be lacking. Case managers must be prepared to work with the best available information and be able to seek out alternate sources that may be able to provide additional information.

8. Although local citizens are a priority in disaster response, tourists and foreign nationals should be included in preparedness and response plans. While non-injured foreign nationals will be a low priority, they can add to the burden of response resources if they are live without food, water, sanitation, or medical care for a period of time.

9. Sharing links to map files can require large amounts of bandwidth that are not always available to field deployment teams. Including coordinates in the textual portion of a report can be very helpful to teams on the ground.

10. Overall, integrating our digital response with the Kathmandu Living Labs response was unique and invaluable. Timing of the reports to KLL was well coordinated, and we were able to deliver information to Nepal aid coordinators when they needed it. Despite the volume of data that needed to be sieved through, the HR team worked well in the limited time available to clean up data while also highlighting missing needs. A disaster response questionnaire prepared for specific disasters would help to gather important information more quickly, especially contact numbers and locations.

11. It was suggested that HR should develop teams who know how to use the tools utilized in the Nepal response and who can commit to using that knowledge in similar situations.
12. During April and May, Scanigo was used to aggregate and filter tweets in order to provide first responders and strategic partners with situational information that would enhance the common operating picture. Urgent needs that were identified were relayed by various means to first responders and to a crisis map launched by Kathmandu Living Labs. Scanigo filtered 1.2 million Nepal related tweets to just 4,638, representing a 99.3% reduction which significantly reduced human analysis required. A total of 150 reports of urgent needs were identified by Humanity Road volunteers. Scanigo performed well with no interruption of service and with multiple users and multiple recordings in progress.

Positive Feedback from Partners/Stakeholders

From Kathmandu Living Labs:

“Humanity Road helped us to collect, verify, and process reports coming to the quakemap platform. Quakemap was used as one of the key information sources in Nepal's earthquake response and relief work. In addition, they created Situation Reports periodically based on the information available in quakemap.org and other sources. The report was used by different humanitarian agencies.”

“This was the first time I worked with Humanity Road directly. I found them open and highly professional. I am impressed with their practical advice and inspired by their passion in helping people in crisis. They were always accessible in Skype, emails etc. when I needed them. It was great experience working with them.”

From another stakeholder:

“I'm a medical doctor and I lead disaster response teams. I've led teams for the US Navy, FEMA, the Roddenberry Foundation, and others in Iraq, Afghanistan, Katrina, Port-au-Prince, Banda Aceh, Tacloban, Kathmandu, Izmit, and more. Over the past several years I've come to expect to see Humanity Road at work by the time I arrive in any event and that's been consistently so, including the most recent Nepalese Earthquake. Cat and her team were coordinating communications between dozens of organizations inside the first three days after...
the earthquake and they continued through my own ten-day team deployment there and back. I was able to ask her team questions while we prepared for deployment and get answers relayed from experts within hours. I was able to give her updates from our work in the foothills of the Himalayas and her team relayed our status and our needs to other teams within minutes. I now consider Humanity Road an integral asset for us during responses and I seek them out before I go anywhere. One of the most valuable attributes any of us can ask for is professional reliability and Humanity Road is there, every time. Speaking for my own teams, remembering far-away nights in the dark linked only by satellite phone, Cat and her volunteers have our deep thanks"