A.30 Natural Disaster

A.30 Thailand – 2011 – Bangkok Floods

Overview:

Keywords: Non-displaced, Collective centres, Hosting, Urban neighbourhoods, Guidelines and training materials, mass communications.

Summary

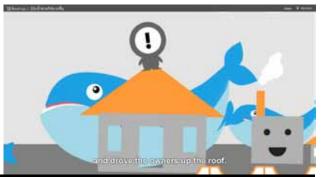
During the 2011 floods in Thailand, social media became a crucial tool for information-sharing and decision-making, both for those affected by the floods and for agencies responding to needs.

The use of social media presents challenges in terms of filtering useful information from misinformation, the reliability and accountability of those distributing message, and identifying communication channels and strategies which will reach specific target groups. Some people may not use social media at all.

This overview draws particularly on two publications: "The role of Twitter during a natural disaster: Case study of 2011 Thai Flood," in Technology Management for Emerging Technologies (PICMET) and "Flooding in Thailand: flee, fight or float", Forced Migration Review No. 41, by Wan Sophonpanich.







This animated video explained the floods, and whether people should stay or evacuate, using whales to help explain the volume of flood waters. It has received over one million internet hits.

Images: Roo Su Flood

Background

A combination of a heavy rainy season and tropical storms caused the worst flooding Thailand had seen for fifty years. Over five per cent of the country's land was under water by November 2011 and the flooding had affected 13 million people and caused 813 deaths.

A novel way of thinking about the volume of water that had accumulated and needed to be dispersed was presented by the animation group *Roo Su Flood* (Know, Fight, Flood).

The billions of litres of water was calculated to be the equivalent of 50 million blue whales, and Roo Su Flood made a popular online animation which explained the impact of the floods in terms of these millions of whales slowly trying to make their way out of the country and into the Gulf of Thailand.

(www.youtube.com/roosuflood)

Response options

As the floods slowly moved towards Bangkok and its surrounding areas, people began to make contingency plans.

Despite the scale of the floods and the number of people affected, the capacity of the Thai authorities, national NGOs, community groups and individuals to deal with problems meant that international organisations played a relatively small role in the response.

Flooding does not automatically lead to displacement. In fact, Thailand's traditional building designs historically coped with floods by allowing water to flow through the bottom floor of a house while the family retreated upstairs to wait for the water to disperse.

However, in many urban areas of Thailand the traditional cultural capacity to mitigate the effects of flooding has been lost. Those caught up by the flooding can be categorised into the following groups:

- **Precautionary displaced**: People sealed-up their houses and garages and moved away from risk areas until the water levels dropped.
- Emergency displaced: People forced to move to collective centres or friends once the flood swamped their homes.
- Stayed with simple precautions: People living in areas where flooding is more frequent were able to withstand flood heights of two to three metres, with minimal assistance needed to replace their temporarily lost livelihoods.
- Stayed with advanced precautions: People with considerable resources built flood-defence walls,



sandbagged entrances, installed water pumps or bought motor-boats. People in this group often helped out in their neighbourhoods.

 Stayed with high level of need: People who chose not to move but lacked the ability to cope with the consequences of the flood and relied on external assistance

People who relocated sometimes found that they had under-estimated the impact of the floods and were forced to stay away much longer than they initially planned. This had knock-on effects for their livelihoods

Some of those moving to collective centres were displaced for a second time when the centres themselves flooded.

Information flood

Information was available from a huge number of different sources: the private sector, print and online media, the government, NGOs and informal social media.

The founder of the animation group that produced the Roo Su Flood series, explained how the animations were a response to the difficulty in picking out useful information from misinformation.

Information was not only being communicated by a multitude of different actors but was also

competing for attention.

In some cases, for example, politicians offered different advice and assessments with political point-scoring in mind.

"We are not only being flooded by floodwaters, but also by information."

Reliable information?

Twitter usage in Thailand soared by 20 per cent between September and October 2011. A research paper published in 2012 analysed the most prolific tweeters and most re-tweeted tweets.

The study showed that the content of tweets with the hashtag overwhelminaly '#thaiflood' concerned situational announcements and alerts (39 per cent). Support announcements made up ten per cent, requests for assistance accounted for eight per cent of tweets and requests for information five per cent. 37 per cent of tweets were categorised as "other". The study found that the majority of the situational and location-based information was tweeted by members of local communities.

To identify which Twitter users were seen as providing reliable information the study looked at the number of retweets users received.

Those retweeted the most were not necessarily those who tweeted the most or had the most followers.

Those with the most retweets included:

- Thaiflood / kapookdotcom: These accounts tweeted information from the private sector site thaiflood.com. Thaiflood.com became a major source of information, with an active community and facebook page, and also collaborated with Google's Thailand Floods Crisis Response site.
- SiamArsa: An account belonging to one of the largest volunteer groups. It used Twitter and Facebook to share information about flooding and volunteer work.
- GCC_1111: The account belonging to the official government website for the Flood Relief Operation Center (http://floodthailand.net) which also facilitated the posting of assistance requests.

Lessons to learn

Using and monitoring social media is an important part of disaster response in today's world. An active analysis of the data can help prioritise communication channels and displacement patterns, while coordinated messaging can reduce panic and misinformation.

A.30 Natural Disaster





Some people moved to evacuation centres, where emergency support was available, often from volunteer group. However the majority of people decided to stay.

Photo: Thanchanitch Suttichote/IOM Thailand

The two reports in the summary note the following learnings:

- **Verification**: It was not always possible for people or agencies to easily identify misinformation.
- Accountability: Those actors giving advice did not always consider how they might be accountable for the messages they sent out.
- Rights and responsibilities: Knowledge and understanding of humanitarian principles and codes of good conduct was often overlooked.
- **Simplicity**: The popularity of Roo Su Flood demonstrated that there was an appetite for easily understandable messages communicated in novel ways.
- Context and target audience: The audience for the messages should be made clear. For example, providing information on how to seal up a door may be technically correct for low-level flooding but inappropriate and dangerous in high-risk areas.

Of course, not all the electronic information is available to everyone, and communities with little or no access to the internet not only had less access to information, but were also less able to vocalise their needs.

This is particularly true of highly-excluded groups, such as migrant workers. The migrant workers not only had less access to electronic information due to langues issues, but may also have had less access to the support available to Thais. There were reports migrants were denied access to some collective centres and relief items.



Most people decided to stay in their houses with various levels of precautions against the flood waters. Some vulnerable people did not relocate and did not have access to the electronic information, and required special assistance.

Photo: Wan Sophanpanich