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Local Interventions Group
data-driven development

NEPAL



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Read the others at thedatashift.org/learning-zone/research/.

This report is one of a three-part series in which researchers from DataShift's pilot locations – Argentina, East Africa (Tanzania and Kenya) and Nepal – examine the impact of citizen-generated data initiatives in their own countries. Read the others at thedatashift.org/learning-zone/research/.

DataShift is an initiative that is building the capacity and confidence of civil society organisations to produce and use citizen-generated data. We are supporting civil society organisations that produce and use citizen-generated data in our initial pilot locations: Argentina, Nepal, Kenya and Tanzania. The project is sharing experiences to build capacity on citizen-generated data across the world, and is seeking to inform and influence global policy processes on the SDGs and the data revolution for sustainable development. DataShift an initiative of CIVICUS, in partnership with the engine room and Wingu.



NEPAL



THE IMPACT OF CITIZEN-GENERATED DATA IN NEPAL

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INTRODUCTION

This research is the result of a partnership between the Local Interventions Group (LIG) and DataShift to study the long-term impact of citizen-generated data in Nepal. For the purposes of this research, citizen-generated data is understood to be the voluntary participation of members of the public "in scientific research, including but not limited to data collection and analysis".¹ The researchers met those involved with each initiative to discuss ongoing activities, assessing each initiative for:

1. Use of data: Has the data been used by policy-makers, civil society organisations or other actors? If so, how?
2. Data quality: Are any levels of verification built into the initiative? How sound is the data, particularly if it comes from multiple sources?
3. Sustainability of the initiative: What is the initiative's projected lifespan? Is this clearly indicated? Are there plans to maintain the initiative's online presence after the period of data collection ends?
4. Local context: How is the data on the topics the initiatives address received at the local level? Is it considered trustworthy?
5. Assessment of impact: What is the impact of the initiative?

¹ Bailey Smith, "Agency Liability Stemming from Citizen-Generated Data", Wilson Center, accessed December 31, 2015, http://www.wilsoncenter.org/sites/default/files/AgencyLiability_final.pdf

METHODOLOGY

The four chosen initiatives are working on two of the most pertinent problems currently facing Nepal: the earthquake response and political/social instability as a result of the newly promulgated constitution. The research team decided that initiatives working to help solve these difficulties represented the best case study of citizen-generated data because, at such a turbulent time in the country's history, (1) these two events have affected much of the population directly and therefore have a large "data pool"; and (2) the initiatives have actively sought citizen-generated data to directly shape their own responses.

The four chosen initiatives are:

1. Nepal Monitor – in line with SDG 17 (shared goals that place people and the planet at the centre) and SDG 16 (building effective accountable institutions)
2. Hamro Police app – in line with SDG 17 (it was developed in the private sector to improve service delivery) and SDG 16 (building effective accountable institutions)
3. Open Mic – in line with SDG 17 (promotion of peaceful and inclusive societies for sustainable development)
4. Quake Helpdesk – in line with SDG 17 (promotion of peaceful and inclusive societies for sustainable development)

Once case study selection was completed, the research team arranged meetings with influential people in each initiative to discuss their work in detail. This proved challenging because of the limited time for research coupled with the added difficulty of political unrest in Nepal. The ability of researchers to meet key informants was restricted by chronic fuel shortages and, as a result, only four initiatives were researched.

The researchers developed an interview question guideline designed to assess the five metrics above. In some cases, key informants were contacted by mobile phone and/or mobile phone to collect further data. The research team then analysed the information that emerged.



CASE STUDIES

NEPAL MONITOR

<https://www.nepalmonitor.org/>

Nepal Monitor, managed by the Collective Campaign for Peace (COCAP), is a protection and conflict prevention initiative. It was started by Peace Brigades International (PBI), but control of the project was transferred to COCAP in November 2015. To build capacity, the initiative is still financially supported by PBI and the overall project coordinator is PBI-affiliated.

The initiative has created a website-based platform to share “human rights and security incidents” with “local, national and international organisations”.² In addition to this, the organisation has five concrete goals:

1. democratise access to human rights and security information while improving the capabilities of human rights defenders to use this information.
2. encourage and support cooperation between human rights defenders.
3. leverage international presence to provide additional measures of protection for human rights defenders as needed.
4. further international understanding of Nepal’s conflicts with the goal of facilitating connections between Nepali organisations and the world.
5. end the presence of PBI by strengthening local civil society.³

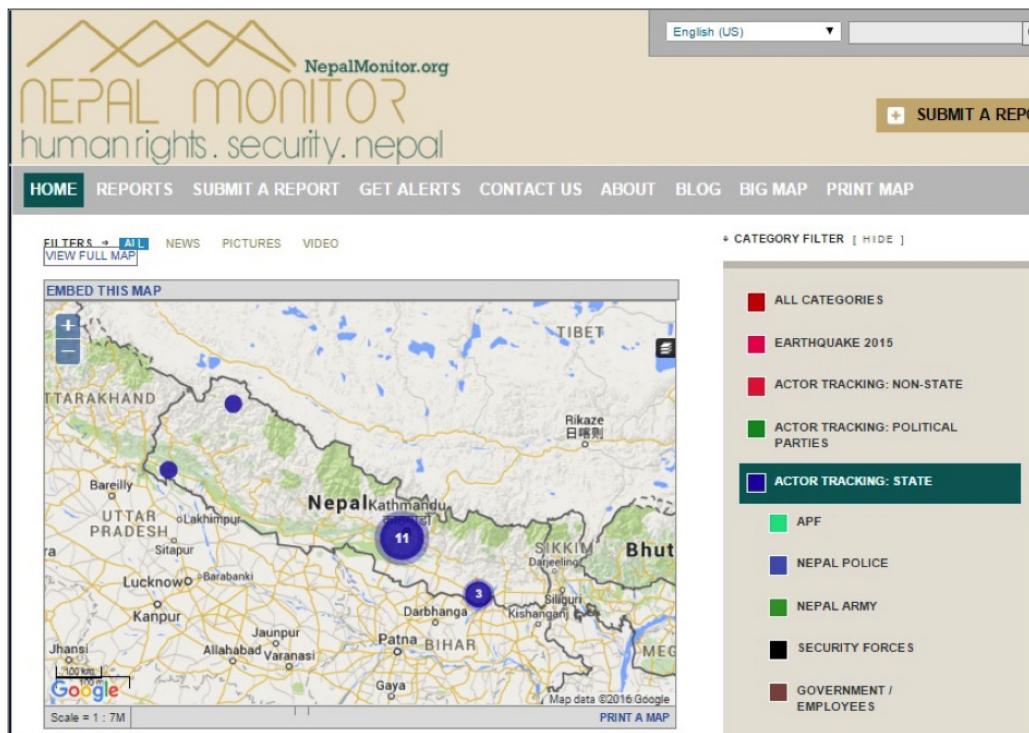
To achieve these goals, Nepal Monitor works with established human rights defenders (activists, journalists) throughout the country to collect data on various issues, such as “human rights” (kidnapping, torture, excessive force), “security” incidents (arrests, seizure, arson), “gender violence” and “earthquake 2015”. These are reported to Nepal Monitor through its website: <http://www.nepalmonitor.org/reports/submit>, by email or by phone.

There is no specific template to report relevant incidents. Reports are then mapped on a Ushahidi-based platform that locates incidents on a map of Nepal.

2 See <https://www.nepalmonitor.org/page/index/1>

3 See <https://www.nepalmonitor.org/page/index/1>

A screenshot of the Nepal Monitor Ushahidi instance



Nepal Monitor will then follow up with the victim/victim's family and try to connect them to national or international non-governmental organisations (NGOs) who can take up the case.

COLLECTION METHOD

Nepal Monitor collects data through two channels:

1. media and online sources
2. its network of human right defenders (which includes 200 human rights organisations and individuals across Nepal).⁴

Every morning, staff of Nepal Monitor look through the daily newspapers (both English and Nepali), online sources⁵ and other human rights websites⁶ for human rights and security incidents. Media reports are marked "not-verified" when they are mapped, to allow citizens to independently verify them.

Reports are also delivered to Nepal Monitor from human rights defenders throughout the country. There is no template for the reports to follow. Once such

⁴ See <https://www.nepalmonitor.org/main>

⁵ Such as <http://setopati.net/>

⁶ Such as INSEC's website: <http://insec.org.np>

a report is made, the Nepal Monitor team does further research on the topic by contacting partner organisations in the vicinity and searching the media.

DATA QUALITY

Data collected from human rights defenders is, as mentioned above, collected through the organisation's website, or by email or telephone. When this information is received, Nepal Monitor first contacts local COCAP members/partners to try to verify it. Only reports from human rights organisations that have performed their own verification processes, such as the Informal Service Sector Centre (INSEC), are considered verified.

Not all reports received by Nepal Monitor are mapped. In some cases, sensitive cases (in ongoing investigations or by personal request) are not mapped.

USE OF DATA

Since its pilot project in 2002, Nepal Monitor has mapped 7,354 reports on its website. Of these reports,

1. 130 were related to protection issues after the earthquake.
2. 1,962 were in the category of "human rights".
3. 7,221 were in the category of "security".
4. 3,663 were in the category of "gender violence".
5. 1,473 were in the category "election or CA- [Constitutional Assembly]-related".

These reports are organised by category on the website, allowing the user to filter content. Reports are classified into 17 broad categories, with those submitted to 14 of these 17 categories further categorised into more focused categories. For example, incidents mapped under "actor tracking: state" are further categorised into reports on "Nepal Army", "police", "Armed Police Force", "security forces" and "government/employees".

Reports are also sent out in shortened forms through SMS to subscribers of the service (between 800-850 SMS) on a daily basis.

Nepal Monitor has also, for the past three years, been a member of the Capacities for Peace (C4P) project, a Saferworld initiative. Starting in 2014, partner organisations in this initiative agreed to contribute on a quarterly basis to its Violence and Early Warning/Early Response Reports. So far, two reports in Nepali have been published on the Nepal Monitor website (from August 8, 2015 and October 10, 2015).

Among the subscribers of Nepal Monitor are security service actors (embassy security) and international agencies (e.g. Peace Corps, UN Development Programme, UN Population Fund (UNFPA)).

Nepal Monitor has anecdotal evidence of local unrelated human rights defenders and journalists taking up cases on the basis of its reports. How often this has happened is unclear. Nepal Monitor has also been told informally that embassies have included sections of its reports in their own annual human rights reports sent to headquarters.

Prior to October 2015, while its legal status was being reviewed (when ownership was being transferred from PBI to COCAP), Nepal Monitor focused all of its efforts on outreach to civil society. Once its legal status was clarified, Nepal Monitor began to collect data from police officers during field trips. A review of its work has also been conducted by the Peace Ministry and the Social Welfare Council (an umbrella government organisation regulating NGO activities in Nepal). During this review, a representative of the Social Welfare Council suggested Nepal Monitor seek to work with the Home Ministry and Local Peace Committees (formed to encourage "inclusive peacemaking and peacebuilding processes").⁷

Nepal Monitor conducts no tracking of website traffic. It did note that, during times of emergency (the earthquake, continuing protests in the south), there is a spike in activity. Nepal Monitor maintains a Facebook page (866 likes) where it shares its reports, and a Twitter handle (130 followers).

LOCAL CONTEXT AND SUSTAINABILITY

Nepal Monitor has received mixed feedback from subscribers to its updates. Most (exact figures not provided) people felt the information they were receiving via text and email was useful. Others felt too much information was being shared at once. As Nepal Monitor does not have a mechanism to keep track of people unsubscribing from their information, its staff are unaware as to why people unsubscribe.

PBI currently plans to hand over complete control of Nepal Monitor to COCAP in 2017. To enable this handover, the initiative has secured funding from the German Civil Peace Service until 2017. Beyond 2017, COCAP will have to seek funding if it is to continue the initiative. The Asia Foundation has shown interest in this regard.

IMPACT

The ability of the Nepali state's security forces to ensure the safety of human rights defenders is diminished as a result of the civil war (in which security forces were implicated in gross human rights violations) and political infighting. Nepal

⁷ Andries Odendaal, "Local Peace Committees: Some Reflections and Lessons Learnt", <http://www.i4pinternational.org/files/207/3.+LOCAL+PEACE+COMMITTEES.pdf>, accessed December 7 2015.

Monitor hopes to contribute to local human rights defenders taking up more cases based on the data it has generated and to increase coordination in the handling of these cases on the ground. Additionally, it hopes human rights defenders will use the training given to them on information, communication and technology (ICT) security by Nepal Monitor.

However, as it has been in operation (under COCAP) for a year only, the long-term impacts of Nepal Monitor are unknown. While the data generated is shared with 850-900 individuals and organisations (embassies, international NGOs and other international bodies), it has yet to be publicly accepted by those in power. As noted previously, Nepal Monitor has only anecdotal evidence on the impact of its work. No independent evaluation has been conducted, although one is scheduled for 2016 to judge the impact of the initiative.

HAMRO POLICE APP

The app is available on mobile phones operating Android (<https://play.google.com/store/apps/details?id=app.thirdpoleconnect.crs&hl=en>) and Apple's iOS (<https://itunes.apple.com/np/app/hamro-police/id1008060023?mt=8>)

The Hamro Police app is an attempt to encourage the public to take an active role in the safety of their community while reducing the time it takes to report an incident in the Kathmandu Valley area. Hamro in Nepali translates to "our" in English, and this use of the plural possessive indicates the long-term goal of the initiative: to improve the relationship between Nepali citizens and their police by improving response times to incident reports.

The app is the result of a collaborative effort between Nepal Police, Islington College (a Kathmandu-based educational institution specialising in technology and business, which designed the app) and Third Pole Connect (a private technology company, which developed the app). Prior to the app's launch in July 2015, Islington College and Third Pole Connect incorporated features suggested by the police.

The police have taken complete ownership of the project and have actively promoted it to the public.

COLLECTION METHOD

The app is designed to collect multiple types of citizen-generated data. It collects the name, address and phone number of the registrant (anyone who downloads the app). At the same time, it collects incident-related data, such as information on the reported incident, location and picture of the incident.

The Hamro app's user interface



To file a report, the app requires access to wifi or the internet. However, an integrated free SMS system means reports can be submitted when there is no access to wifi.

All reports appear in the control room located at the central police station.

The control room is equipped with three officers appointed to man the app alerts at all times. Alerts are processed immediately and then conveyed to the dispatcher, who directs the nearest officers to respond. The GPS coordinates of each message are also automatically relayed to the control room, allowing the police to map out virtually, in real time, incidents of crime throughout the city. The 5-10 reports a day are combined with the 120 incident reports the Metropolitan Police handle on average each day.

Reports are geo-tagged and marked under a category such as "attempted assault" or "traffic accident". The app also collects complaints, "public thanks" and shorter SMS reports. Everything the app collects is included in an online toolkit that police can use to filter incidents by location, category and date and to generate non-official aggregate reports.

DATA QUALITY

The app requires citizens to register prior to submitting a crime report. The "profile info" asks citizens to submit their full name, a mobile number and an email address. The researchers were told this simple step of registering means there have only been a handful of false reports. As a result, the police say they trust the reports they collect.

If a report is not clear, the police will call the citizen to verify it. Police estimate that around 5% of the reports they receive are false, but that this is roughly equivalent to the percentage of false reports reported on their telephone hotline.

USE OF DATA

There is no information on how the general public has used or responded to the data, as the collected datasets are currently unavailable outside police headquarters. Police interviewees said they would like to see broader use of the collected data but were constrained by the confidential nature of police reports.

During the first few months after the app's launch, police held an active campaign in secondary schools and colleges to target and engage youth. As a result, "Most of the app's users are youngsters," according to Superintendent Basnyet. Although demographic data on the user base is not available, as a long registration process would be a deterrent to citizen uptake, Superintendent Basnyet said that their impression over the previous six months had been that youth and young adults preferred to use the app, whereas older adults preferred the emergency call number.

The data is used to map out crime incidents and shorten police response times.

The police informed us that they found the toolkit useful to generate reports and analyse trends in crimes, spatially, over time or based on another attribute. There are plans to eventually release aggregated reports to government ministries and official government-funded organisations that could benefit from incident report information - such as women's advocacy groups and human rights defenders.

LOCAL CONTEXT AND SUSTAINABILITY

The police have responded positively to the app and have taken complete ownership of it. They are currently exploring ways to promote it to marginalised communities (urban poor, religious minorities) to increase their participation in their security.

Furthermore, the police see the app as being in line with a new emphasis on "community policing". They feel it will help them build stronger links⁸ with local communities, encouraging them to take an active role in, and are now planning on increasing its coverage. The app will be available in Pokhara, Chitwan and Biratnagar by the end of 2016.

However, the app requires a smartphone to download and operate. Feature phones (basic, cheaper models) cannot use it, meaning an estimated 65% of mobile phone users have no access to it,⁹ limiting its full potential success.

⁸ See http://discoverpolicing.org/whats_like/community-policing/

⁹ See The Kathmandu Post, "The shift from feature phones to smartphones cannot stop", The Kathmandu Post, 20 August 2014, <http://kathmandupost.ekantipur.com/news/2014-08-20/the-shift-from-feature-phones-to-smartphones-cannot-stop.html>, accessed 30 January 2016; Kathmandu Today, "Rise in number of mobile phone users", Kathmandu Today, 29 January 2016, <http://www.ktm2day.com/2016/01/29/rise-in-number-of-mobile-phone-users/>, accessed 30 January 2016; Republica, Low smartphone penetration a challenge for app developers,

Furthermore, a lack of resources has meant the police have been unable to increase the public's awareness of the app. Within the goal of expanding coverage, the police are intending to hold an awareness-raising campaign to encourage the public to use the app.

IMPACT

On the one hand, the app has been making a positive impact on policing, as the plan to increase the operational areas of the app shows. In addition to this, the public's reaction, with 30,000 downloads and 11,000 "active users" (citizens who generally submit a report once a month, locate nearest police stations, find names and telephone numbers of police stations and those who have clicked on news/police alerts), seems to be generally positive.

However, the app's impact is limited by two factors: (1) it requires a smartphone to operate and (2) even after the proposed expansion, it will be available only in urban areas.

With more than half the public today using feature phones, and the relatively high cost of smartphones compared with feature phones, the app is available only to more prosperous citizens. It is unclear how the police intend to overcome this in their promotion of the app to marginalised communities.

Furthermore, Nepal is one of the least urbanised countries in the world (17% in 2011). As such, usage of the app is further limited by being operational only in urban areas.

OPEN MIC

<http://quakehelpdesk.org/openmic.php>

The Open Mic project started in the immediate aftermath of the earthquake of 25 April 2015, as an effort to ensure correct information was provided to earthquake victims. Established by Internews (an international NGO that seeks to provide people with the information they need, “the ability to connect and the means to make their voices heard”),¹⁰ Open Mic tracks “perceptions and rumours circulating on the ground among earthquake- affected communities¹¹ about the relief effort. The initiative also tracks concerns arising from these communities.

District-specific rumours/concerns are collected by Open Mic’s network of staff in affected communities and from partner organisations working extensively on the ground.

Common rumours are noted and, depending on the nature of the rumour, relevant authority figures are contacted to speak about them. The response of the relevant authority is then used to produce radio programmes in Kathmandu or district headquarters for broadcasts.

This is one example of how the Open Mic initiative tracks rumours: In December, it was believed in Gorkha Bazaar that the Canadian government had offered to allow in earthquake-affected communities – an offer the Nepal government refused. This rumour was taken to the Department of Foreign Employment for verification. The department informed the Open Mic project that no such provision had been made. The Open Mic then published this information on its website and provided it to radio stations in Gorkha to broadcast and the UN Office for the Coordination of Humanitarian Affairs (OCHA) for further distribution. This rumour was thus “debunked”.

Each week, five rumours are debunked in this manner. The project currently employs 70 people in the districts to collect rumours from the communities they work in.

10 See <https://www.internews.org>
11 See <http://www.internews.org/our-stories/project-updates/open-mic-nepal>

COLLECTION METHOD

The first stage of collecting the data is identifying a rumour. There are three main ways the Open Mic projects collects its data:

The six specific petitions are as follows:

1. From its network of 70 employees: Called "front line associates" (FLAs) by the initiative, these people come from the communities/regions where data is sourced. There are 5 FLAs in each of the 14-worst affected districts. Quake Helpdesk operates in around 10-12 Village Development Committee (VDC)s in each district, and they are managed by district coordinators, who are respected journalists from the district who have contacts with the authorities. The district coordinators receive daily rumours/concerns from the FLAs working in their district and "cross-check" rumours to identify the five rumours for the bulletin. This is the project's primary method of collecting data.
2. From other humanitarian agencies: Agencies working in the affected communities provide Open Mic with rumours/concerns they have encountered while in the field. Open Mic has around 15 such agencies that contribute this information (including World Vision, OCHA and the Red Cross).
3. From radio stations: Four radio stations provide weekly bulletins to Open Mic detailing the rumours and concerns they encounter in their localities. Two other radio stations do this on an ad hoc basis.

DATA QUALITY

As Open Mic collects rumours (input), puts them through a verification process and produces content disproving them (output), it must ensure the quality of both the input data and the output information.

The quality of the input is largely up to the FLA reporting the rumour and the district coordinator collecting or compiling the data. District coordinators have to "cross-check" the rumour by contacting another Open Mic-affiliated person to see if they have also heard the rumour.

The quality of the output is essential for the initiative as the broadcasts are intended to help communities obtain the information they need. To ensure the output is correct, Nepal Monitor presents the rumours to the relevant authorities for their input. Along with the Department of Employment, Open Mic has contacted the Department of Urban Development and Building Construction and the Ministry of Urban Development for rumours/concerns related to government policies.

For rumours/concerns unrelated to the government, the initiative has so far contacted doctors, scientists, geologists, engineers and psychology counsellors.


ISSUE #29

February 1, 2016

Welcome to the twenty-ninth issue of **OPEN MIC NEPAL** bulletin. The Open Mic project captures rumours and perceptions on the ground to eliminate information gaps between the media, humanitarian agencies and local people. By providing local media and outreach workers with facts, Open Mic aims to create a better understanding of the needs of the earthquake-affected communities and to debunk rumours before they can do any harm.

CONCERNS

PAANCHKHAL, KAVREPALANCHOWK

"In some cases, four members of the same household received Rs 15,000 each. In others, families



CHAUTARA, SINDHUPALCHOK

"They say if we don't have landownership certificates, the government won't give us the grant and loan."

SANGACHOK, SINDHUPALCHOK

DATA USE

Since its launch in June 2015, Open Mic has published 24 issues, debunking 120 rumours in the process. Weekly bulletins are sent to 100 community radio stations in the 14 worst-affected districts and to 400 local journalists. Radio broadcasts are estimated to have 1 million listeners a week.

In addition to this, Open Mic sends its bulletins to around 25 international and national NGOs working in the earthquake-affected areas. The bulletins are widely circulated among 11 different UN-affiliated "clusters"¹² working on earthquake response. The bulletins are also forwarded every week to the Association of International NGOs in Nepal (AIN) to be shared.

The bulletins have helped shape the responses of some of the organisations. Catholic Relief Services (CRS), currently operating in Gorkha district, has used the bulletins to produce an educational radio drama series about the earthquake response. The CRS has also developed question answer sessions with local communities using the weekly bulletins to answer concerns arising in communities. The UN Children's Fund (UNICEF) has used health-related rumours to attempt to understand which problems are affecting which communities.

¹² See <http://www.internews.org/our-stories/project-updates/open-mic-nepal>

LOCAL CONTEXT AND SUSTAINABILITY

The Open Mic project is scheduled to continue until April 2016, as its work is related directly to earthquake response. However, the impact of the project should be felt beyond the initiative itself as it has encouraged others to seek citizen-generated data. Four radio programmes (Radio Rajmarga from Dhading, Radio Rameechaap, Radio Langtang, Radio Gorkha and Radio Namabuddha from Kavre) have used Open Mic's data collection model to begin their own data collections for radio programming. Open Mic has also been orienting Red Cross staff to incorporate public concerns/rumours into their project development.

Other NGOs, like Oxfam and Feedback Lab, have expressed an interest in funding the project to ensure it runs into 2016. Oxfam also wants to create a more intensive information support desk that compiles reports locally and provides direct support. Oxfam is also interested in expanding the capacity of local radio stations to disseminate earthquake-related information.

IMPACT

When asked what the original impact goals of the initiative were, Open Mic informed us it had a desire to provide a reliable earthquake response by utilising radio programming. With 100 radio stations now receiving updates, the Open Mic team believes it had been able to have the impact it sought. The research team also spoke to a district coordinator of the initiative, Madhusudhan Guragain, about the impact he had observed:

"Before the Open Mic bulletins, nothing was verified. Once the bulletins started, the verification process began and the public began to trust the data."

Open Mic admits that it has little control of data collection by the district coordinators, however. As the district coordinators are responsible for verifying rumours and concerns, they are largely responsible for the authenticity of the data collected. This means there is a chance that rumours that are in fact relatively minor could be included in programmes.

QUAKE HELPDESK

<http://quakehelpdesk.org>

Quake Helpdesk initially started with the goal of collecting citizen-generated data from earthquake victims in April 2015, and has seen its data collection methodology change in the months following the earthquake.

Initially, teams picked up data to submit to the government to direct aid towards specific communities. The community of Challing, for example, was connected to an Indonesian emergency team that had been desperately trying to identify a village to support. Another team was able to help Chapagaun by connecting it with a local philanthropic organisation, Satya Saikendra, that was able to provide them with food.

After, Quake Helpdesk shifted its focus towards ensuring public accountability of the relief process, so as to strengthen the “[demand side](#)” (raising public awareness of the response) and the “[supply side](#)” (improving government and NGO service delivery).

The aim is to identify what communities need and where there is an “[information gap](#)”,¹³ and then to address these gaps. Quake Helpdesk also informs the public about pledges the government has made to earthquake victims, equipping them to spot cases of corruption and mismanagement, and identifies gaps in services on the provider side.

COLLECTION METHOD

In the immediate aftermath of the earthquake, Quake Helpdesk worked closely with the Nepali Home Ministry to collect “raw data” (name, phone number, location, problem experienced) from affected communities. Quake Helpdesk manned government call centres created to listen to public grievances. The initiative also produced a SMS shortcode (4000) to allow citizens to connect with the government. The data generated at this stage was given to the government as the latter needed this information to shape its immediate response. There was no

¹³ Questions target both single women and mothers. They sometimes include questions from other agencies. For example, UN Women uses the survey.

analysis carried out on this data and it was presented to the government in the format it was collected in.

At the same time, small teams of Quake Helpdesk staff were sent into disaster-affected communities to collect data from those impacted by the quake. The teams manually collected data on problems facing the community, their needs and whether anyone had helped them. This data was then used to direct aid to communities.

Once the immediate response period was over (five to six weeks after the first earthquake) and the government call centres were shut down, Quake Helpdesk shifted its focus away from collecting information on people's immediate needs towards ensuring "public accountability of the relief process".¹⁴

The demand side is strengthened through a monthly survey in affected communities to judge general perceptions of communities towards the relief process. With support from the UN, the surveys ask 14 questions designed to (1) understand the problems facing communities and (2) identify information gaps in the community.

Surveys are conducted at the end of every month and take a week to complete. A total of 100 surveys are carried out in each district, to make 1,400 surveys collected each month. The results of the survey are collected in Kathmandu and analysed by the Quake Helpdesk team, to identify what communities need and where there is an information gap. Radio content is produced to address these information gaps and is then broadcast in those communities.

The demand side is further strengthened through the tracking of "financial flows" from central level into the district/region. Quake Helpdesk obtains information from the government on how much money is allocated for the relief effort to each district and VDC. This information is then included in the radio bulletins. The goal is to communicate information back to the communities and ensure that the

An example of a Quake Helpdesk survey

14 <http://www.quakehelpdesk.org/what.php>

government is accountable for its disaster relief activities.

On the supply side, information collected through the surveys will help identify shortcomings in the response. In addition to this, data generated by the Quake Helpdesk surveys has informed various NGOs on where to operate and what aid to provide.

DATA QUALITY

There was no quality check for the first phase of data collection (after the earthquake) as the data was urgently needed by the Home Ministry to shape its own response.

With the surveys, Quake Helpdesk verifies collected data by calling five random respondents in each district after each survey round. Their locations are also chosen at random. Owing to staff shortages and the need to collect the data quickly, Quake Helpdesk is unable to add further levels to ensure data quality.

Data collection can be problematic for Quake Helpdesk. District teams often complain about the difficulties they face in going to remote communities to carry out surveys. Landslides cut off road access to some communities, effectively halting the ability to collect data there. An ongoing fuel shortage has made data collection even more difficult.

The initiative also risks generating faulty data through its survey, as the difficult terrain may lead FLAs to fill these out themselves without venturing into affected communities. When the contact was asked about these issues, the researchers were told this had happened in a few cases but that the faulty data had been identified and removed.

USE OF THE DATA

In the immediate aftermath of the earthquake, data (comprising the person's name, location, phone number and problem) collected from government call centres, manned by Quake Helpdesk, was sent to the Home Ministry. No other agency or initiative received this information.

The deputy prime minister and emergency cabinet used data collected from the call centres in the immediate aftermath of the earthquake to identify the needs of affected communities. For example, in Dhading district, the data pinpointed for the government which communities needed what assistance, making it possible to deploy the army in various roles. In some areas, for example, the army provided food; in others, it provided temporary shelters. The data also informed the military where rescue activities were necessary.

As the emergency response was declared over two months after the earthquake, the government saw no need for the data and shut the call centres down.

Once the project shifted focus to increasing the accountability of the relief process, the data generated was made available to third parties. In a few cases, the data was used to adjust policies of international organisations and government agencies.

Even in its very early days - within the first week of the earthquake of April 2015 - Quake Helpdesk received direct citizen reports relating to damaged and inedible shipments of rice that World Food Programme had nonetheless distributed to quake-affected locals in Dhading district. Reports were swiftly relayed to WFP's office in Kathmandu, which in turn withdrew damaged rice shipments from distribution, and penalised the contractor they had used.

At the height of the relief phase in late May 2015, the epicentre Barpak in Gorkha district received a lot of attention and aid, thereby excluding nearby villages like Larpak from concentrated relief efforts. On the basis of Quake Helpdesk reports from citizens that were relayed to Gorkha's Chief District Office (which headed the relief efforts there), international relief agencies active in the districts were able to coordinate more effectively and diversify the way in which they distributed aid. In this way, citizen-generated data led to immediate changes in the way that relief was delivered.

UNFPA has begun a programme to make radio programming in local languages on the availability of health services, as the Quake Helpdesk survey has shown that communities need health service-related information. Other UN agencies, like UNICEF and OCHA, have informed the researchers that they share Quake Helpdesk reports with their partner organisations.

LOCAL CONTEXT AND SUSTAINABILITY

As the initiative is concerned with improving accountability during a disaster, it will run only until the official earthquake response period is over. At this moment, the initiative is scheduled to run until April 2016.

Quake Helpdesk hopes that the initiative's impact will extend beyond April 2016 because the recent graduates that carried out the project will have gained skills that they can use in other projects. Quake Helpdesk said they deliberately attempted to improve the capacity of young people because by building their organisational, data analysis skills, financial flow tracking skills), they could improve their capacity to demand accountability of their government in the future.

The initiative also hopes to strengthen the capacity of citizens to demand accountability of their officials by giving them the right sets of information through radio, local newspapers and bulletins on government spending data at the village

level. The hypothesis is that, when citizens are informed of the money allocated to them under disaster response, their community will mobilise and demand accountability from the government. However, there is currently little evidence that this goal has been achieved.

Quake Helpdesk has also been developing a Disaster Accountability Toolkit (DAT) to improve accountability in future disaster responses by engaging further with local communities. Still in the process of being developed, the DAT is the result of data generated by the surveys that shows local actors were not a significant part of the earthquake response. The knowledge these local actors possess was therefore not included in the overall response, hindering its impact. The DAT is designed to increase participation of local communities in future disaster responses.

IMPACT

It is difficult to judge the impact of the first weeks of data generation (via call centres) as there is no evidence on whether the data contributed to actual policy or practice corrections.

The second stage of data generation (via surveys) has been received warmly by international NGOs working in disaster recovery, which view the data as a valuable tool in critically reflecting on their own approaches.

Representatives of the initiative admit they have experienced problems in engaging with communities. The sheer scale of the destruction means the Quake Helpdesk teams are overstretched while gathering data, as the communities they have to visit are often remote and far apart. The one clear limitation of Quake Helpdesk is that it has been strictly limited to the capital and the surrounding satellite cities of Bhaktapur and Lalitpur, meaning that, during the immediate aftermath of the earthquake, it was assisting only people in the city. While the city was affected by the earthquake, damage in the districts was far more extensive.

CHAL

CHALLENGES FACED BY CITIZEN- GENERATED DATA INITIATIVES IN NEPAL



COMMON CHALLENGES

Being at an early stage, citizen-generated data initiatives in Nepal face some common challenges in the implementation of their work.

The first challenge to overcome relates to low literacy levels in Nepal – at 57.4% in 2013.¹⁵ Open Mic, Nepal Monitor and Quake Helpdesk use their staff to identify rumours and incidents and to fill out surveys for respondents. They have overcome high levels of illiteracy by requiring their own staff to physically collect the data from the community. Being dependent on staff, instead of providing the public with a technological platform to collect input, along with the quality assurances technological platforms can provide, has made these initiatives labour-intensive and the data collected prone to error. In Kathmandu city, where literacy levels are higher, at 98%,¹⁶ technology-based projects have greater potential to reach their target audiences, but still need to adopt simple interfaces that users will find easy to use.

The second challenge lies in creating a new culture of data collection from scratch. Each of the initiatives is a pioneer in their field, and each is learning about the challenges involved as it goes. One indicator of this is the absence of a formalised “data verification” system in all but the Hamro Police app. In addition to this, the initiatives have struggled to achieve greater public exposure, which has hindered their opportunities to expand and gain more support.

Their tasks have been further restricted by a dearth of data skills in Nepal. Nepal Monitor, for example, currently only has four staff members trained in mapping techniques. Other initiatives may therefore find it harder to access and use the data created by the projects in this study, limiting their broader impact. The public also have little to no experience with providing such data. Encouraging the public to share information, therefore, becomes a challenge in itself. Both Open Mic and Quake Helpdesk informed us they were often asked by communities about the purpose of carrying out surveys or identifying rumours.

INDIVIDUAL CHALLENGES

We also found individual, specific challenges among the initiatives researched.

Aside from the Hamro Police app, each faced challenges in verifying the information they collected, in the case of Quake Helpdesk and Nepal Monitor, or the information they disseminated, as with Open Mic. The police believe that the public do not have an interest in filing incorrect reports, and have therefore not experienced significant problems in verifying the data.

¹⁵ See http://www.unicef.org/infobycountry/nepal_nepal_statistics.html

¹⁶ See http://www.kathmandu.gov.np/Page_Ward+Profile_15

The verification process in place for the Hamro Police app, Nepal Monitor and Quake Helpdesk is carried out almost entirely through a phone call made by a member of staff to the reporting individual. While the police have an established control room and dedicated officers to verify information, the other initiatives do not, and this presents several difficulties. The first problem is the time-consuming nature of the verification. On average, Quake Helpdesk staff spend 15 hours in every survey round calling up respondents to ensure (1) the person whose name is on the form did indeed fill out the form and (2) the information collected is accurate. Additional time is spent if the respondent has forgotten filling out the form or if a family member who filled out the form doesn't have a mobile phone and uses a relative's/friend's instead. This happens five to six times each survey round.

In some cases, the phone number written down is incorrect, making it impossible for both Quake Helpdesk and Nepal Monitor staff to verify the information. This is particularly problematic for Quake Helpdesk. Unlike Nepal Monitor, which will label the report "unverified", Quake Helpdesk must either accept or reject the information as it is passed on to OCHA as part of its communication campaign. In such cases, the survey must be discarded.

In the case of Nepal Monitor and Hamro Police app, it is difficult to judge the full impact of the project. The organisations admit they are not sure how many of their individual and organisation accounts are active. When asked if they tracked the number of website visits, they said they did not do so actively. This increases the difficulty of gauging the impact of their work.

While the Hamro Police app has seen 30,000 downloads, it is unclear how these downloads have been spaced out. If the app was downloaded in large numbers only after it was introduced, this might suggest the public is now no longer interested in it or are unaware of it.

Another challenge that arose was the relationship the initiatives have with the public. Nepal Monitor elaborated that, during a survey conducted of its subscribers, there were mixed reviews of its work. While specific figures were not provided to the researchers, the survey showed some people thought simply too much information was being provided. This, we were told, had led some people to unsubscribe – the precise figure is not available.

Both Open Mic and Quake Helpdesk mentioned that they had had to manage false expectations. The community frequently asked staff from both initiatives when tangible aid would be provided to them. When told that was not the purpose of the initiative, community members showed less interest in participating.

Nepal Monitor, Quake Helpdesk and Open Mic have also found it challenging to get the government to use the data they have generated. Aside from the Hamro Police app, only Quake Helpdesk has given its data to the government, and this happened only at the beginning of the initiative.



CONGO

CONCLUSION

CONCLUSION

The development community and civil society are beginning to feel the impact of citizen-generated data. Both Open Mic and Quake Helpdesk have significant buy-in from international NGOs, and the data they generate is being used to shape their approaches to their activities in some cases.

Buy-in from civil society is equally important. Open Mic bulletins are used by 100 community radio stations to develop radio content, with an estimated 1 million listeners each week. At least four radio stations are replicating the rumour/concern tracking mechanism pioneered by Open Mic. Quake Helpdesk survey contents are sent to around 100 community radio stations. These two initiatives are helping create an indigenous environment conducive to data generation. By providing the updates it creates to local human rights defenders, Nepal Monitor is also part of this effort.

Open Mic and Quake Helpdesk have also identified radio as the primary method of disseminating information to remote communities. Radios are perhaps the most effective method of communicating, as they are usually the “only form of media available”.¹⁷ By working closely with community radio stations (“non-profit stations” that offer a service to the community), both initiatives are raising awareness of and normalising citizen-generated data as a means of shaping policy.

However, significant challenges still face citizen-generated data initiatives. Citizens and policy-makers are largely unaware of the potential value of citizen-generated data, while low education levels mean data-gathering is currently a difficult task. This means that Open Mic, Quake Helpdesk and Nepal Monitor have to actively seek information from the public, necessitating large teams/networks. In addition, these initiatives struggle to measure their impact as few tangible indicators are being produced. Even though Open Mic, Nepal Monitor and Quake Helpdesk share bulletins with large numbers of international NGOs, how these bulletins are being used is difficult to judge. It is unclear just how far the police have got with mapping crime hot spots using the data generated by the Hamro Police app.

The research team believes another challenge for the development of citizen-

¹⁷ ACORAB, “Community Radios in Nepal”, December 1, 2012, <http://acorab.org.np/docs/publicationManagement/ca9e53e919d3b1d0700405a76114a103.pdf>, accessed 15 January 2016.

generated data initiatives in Nepal in general is an absence of an ecosystem that can attract talented individuals, engage them in a meaningful way and generally allow innovators to access knowledge and resources. Spontaneous and standalone initiatives like the ones we have studied, no matter how impactful, bear no semblance in direction or purpose to each other. Such independent initiatives need to drastically increase in number and start connecting to each other – at least to initiate a dialogue – so a citizen-generated data ecosystem can start to take shape in the country.

In all the initiatives that we have studied here, we find that local government agencies in Nepal (except the police) struggle with citizen-generated data, primarily because of their lack of technical expertise and platforms and also because civil society organisations in Nepal, so far the champions of citizen-generated data in the country, have failed to engage local governments with constructive dialogue on how it offers value or makes their job easier.

One point we noted was a stark absence of the private sector in such initiatives in Nepal. The team found not one private sector entity involved with citizen-generated data. The current situation – initiatives concentrated in the hands of civil society and just one government agency – cannot represent an inclusive standard to measure citizen-generated data and its impact in Nepal. Until and unless Nepal's private sector discovers the value of citizen-generated data, its proper growth, development and absorption will remain a challenge.

Lastly, few initiatives paid significant attention to the Sustainable Development Goals, despite the fact that many of their end goals were aligned with them. Since civil society seems to be leading the drive towards citizen-generated data in Nepal, aligning their work specifically with the SDGs could help amplify their impact and allow their efforts to reach a wider audience.

In hindsight, Nepal's citizen-generated data is heading in the right direction, but in a slow-burn process in which government, technology and civil society actors begin to agree on the value of such data (as with international NGOs' usage of Open Mic data) and start to use such data in policy-making (as with the will to scale up the usage of the Hamro Police app).

Citizen-generated data in Nepal is at a nascent stage. Although meaningful inroads and drastically increased uptake are unlikely in the short term, the enthusiasm is there. With the right coordination, usage and impact are likely to grow.

KEY INFORMANT PROFILES



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NEP

WHAT IS DATASHIFT?

DataShift is a demand-driven initiative that builds the capacity and confidence of civil society to produce and use citizen-generated data to monitor sustainable development progress, demand accountability and campaign for transformative change. Ultimately, our vision is a world where people-powered accountability drives progress on sustainable development.

WHAT IS DATASHIFT DOING?

DataShift is supporting civil society organisations to produce and use citizen-generated data in our initial pilot locations: Argentina, Nepal, Kenya and Tanzania. It is sharing experiences from this support to build capacity on citizen-generated data across the world, and is seeking to inform and influence global policy processes on the SDGs and the data revolution for sustainable development.

DataShift is an initiative of **CIVICUS**, in partnership with **the engine room** and **Wingu**. For more information, visit www.thedatashift.org or contact datashift@civicus.org.