



Frontline SMS Case Study: Using FrontlineSMS for a Complaints and Response Mechanism in the aftermath of the Pakistan floods

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FrontlineSMS lowers barriers to driving transformative social change using mobile technologies. They build and distribute free and open-source software, provide support and resources to those using their software, and share their expertise to help inspire others.

FrontlineSMS believes in giving local people ownership of the tools they need to change their world for the better. By using available technology — affordable laptops and basic mobile phones — FrontlineSMS helps organizations in both economically developed and under-developed countries to overcome communication barriers they may face. Since 2007 FrontlineSMS has been downloaded over 20,000 times and is being used in over 70 countries.

Sending a message of accountability:

Using FrontlineSMS to improve disaster relief in the aftermath of the Pakistan floods



The 2011 monsoon flooding in Sindh, Pakistan's southernmost province, affected an estimated 5.5 million people. The 2011 floods compounded the damage caused by flooding in 2010, and the lack of clean drinking water, food, healthcare and shelter resulted in communicable and non-communicable diseases across the province. It also destroyed agricultural land and livestock, which resulted in a loss of livelihoods.

In the aftermath of the 2011 flooding the Strengthening Participatory Organization (SPO), a Pakistani NGO, implemented a disaster relief project to distribute food items and shelter. The organization needed a way to receive beneficiary feedback in order to monitor the distribution process, which involved five district level partner organizations. This case study illustrates how SPO worked alongside the Popular Engagement Policy Lab (PEPL) and Raabta Consultants to implement a Complaints and Response Mechanism (CRM) using FrontlineSMS.

Following the flooding, SPO started a new project in the Mirpur Khas district, distributing food items and shelter to those worst affected. A concern of SPO's head office in Islamabad was that complaints and feedback from beneficiaries in previous projects had not been documented or dealt with effectively. A need was identified for an accessible way to monitor the distribution process and receive feedback from those affected by the floods.

Consequently, SPO solicited the help of PEPL who develop research and two-way communications methodologies specializing in innovative uses of low- and high-tech information systems, in collaboration with Raabta Consultants, who help communities in Pakistan access social services provided by the government, NGOs, charities and the private sector. These two organizations were tasked with setting up a mechanism through which people could register issues that they encountered during the flood relief distribution project in order to improve accountability and transparency before, during and after the distribution had taken place.

Mobile Phone Usage

Although less than half of Pakistan's population owns a mobile handset, recent research indicates that more than 70% of people have regular access to a mobile phone. Amongst phone owners in the poorest 60% of Pakistan's population, 51% of men and 33% of women used SMS, according to a survey by LIRNEasia in 2009. Prior to this project, PEPL and Raabta had conducted research in Khyber-Pakhtunkhwa province and the Federally Administered Tribal Areas (FATA) of Pakistan on how people used mobile phones, and found that not only were they used as a tool to share information, but that those who did not own a phone often had access to one through a friend or family member.

PEPL and Raabta were keen to apply lessons learnt from their research to test whether the prevalence of mobiles and the use of SMS could be harnessed to engage with communities. However, the research that they had conducted had not extended to Sindh Province. There were initially some reservations amongst the SPO project team about whether SMS would be effective in this very poor area of Pakistan. Someone even suggested that SMS is a solution that can be considered for Pakistan in ‘five years time, but there is no way that it will work now.’

One particular concern with using SMS was the literacy rate amongst the target beneficiaries. The beneficiaries of SPO’s project were selected by virtue of being the most disadvantaged in each village: often those with disabilities, child-headed households and / or female-headed households, and literacy rates among them were low.

In order to test the suitability of SMS for beneficiary communications in the given context, PEPL and Raabta piloted a questionnaire on mobile phone usage involving participants of both genders in the beneficiary communities. The overwhelming response demonstrated that access to mobile phones was widespread, and if someone did not own a mobile phone they could borrow one from a family member, friend or even village council member, echoing findings from elsewhere in Pakistan. Findings also confirmed literacy rates were low, and this underlined the need to create a system which would be as accessible as possible. It was determined that the majority of beneficiaries, even if illiterate, had access to a mobile phone and could ask a friend or relative to read or write a text message on his or her behalf if necessary.

Another major consideration was the fact that Sindhi is largely written in Arabic text, and not all handsets can recognize the Unicode in which it appears. This meant it was not necessarily feasible to design a system which required beneficiaries to write out full text messages to provide detailed comments and feedback. Thus, following consultations with villagers, the team devised a numbering system for complaints ranging from 0-9. The code was as follows: 1 = Food items, 2 = Shelter, 3 = Conflict 4 = Corruption, 5 = Issues with SPO staff, 6 = Issues with Partner Organization staff, 7 = Issues with Village Council, 8 = Issues affecting women and children, 9 = Issues affecting those with disabilities, and 0 as a means of saying ‘thank you’.

How it All Worked

FrontlineSMS was selected as the most appropriate tool for handling the SMS-based feedback, and was used to implement the Complaints and Response Mechanism (CRM) for SPO’s distribution project. The next step was to configure a system using FrontlineSMS so that people could send an SMS containing the relevant number related to the issue they needed help with. This numbering system provided the ability to send automated replies tailored to individual beneficiary complaints through FrontlineSMS. This system also provided SPO, the NGO running the service, with the information they needed to more effectively tailor their follow up in response to beneficiary feedback. When the database file was exported from FrontlineSMS to Excel it also provided statistics on the nature of complaints per village, per Union Council, and per Partner Organization.

To communicate the availability of the Complaints and Response Mechanism (CRM) required direct interaction with the community. Following the initial field visits cards were printed with corresponding pictures explaining the numbering feedback system. The cards also offered instructions about sending SMS alongside telephone numbers for verbal complaints and guidelines for written complaints. Teams went to every village to distribute the printed leaflets, posters and cards, and explained the process to beneficiaries. During this process, field workers documented all beneficiary phone numbers or relatives’ and friends’ phone numbers, which were then saved in FrontlineSMS. This meant that every message received into FrontlineSMS would also have a name attached to it, enabling personalized auto-replies to contain the name of the sender.

PEPL and Raabta found that building in-person relationships in this project was critical for encouraging uptake of this communications system. Furthermore, by managing their contacts in groups through FrontlineSMS, SPO were able to

create contact lists for village and Union Council members. With their group contact lists, SPO could send tailored messages before each of their five partner organizations started the aid distribution process in order to alert the beneficiaries, and could also solicit feedback via SMS following the distribution. When a message was received from a beneficiary, the response manager would call back, ask for more information, and then follow the internal complaints procedure.

SPO worked with five partner organizations across the district – one in each of the five Union Councils of Mirpur Khas. At each village, a council comprising two men and one woman was selected by the villagers. It was with these councils that the partner organizations liaised and ensured that the food and non-food items were distributed to the beneficiaries. SPO's project targeted 475 beneficiaries across 24 villages. Over the three-month aid distribution project, SPO received 725 messages, 456 of which followed the numbering system. SPO appreciated the opportunity to try a new method of receiving feedback from beneficiaries, and learnt many lessons along the way from this project. Although there were some issues with team members following the complaints procedure in the initial stages as it was first being introduced, the majority of these issues were solved over the three-month pilot. Following the success of the pilot, the importance of an effective and cost efficient Complaints and Response Mechanism (CRM) alongside a revised complaints handling procedure has since been realized within SPO project staff as well as its management.

Lessons Learned

- By carrying out a questionnaire on people's mobile usage, PEPL and Raabta not only provided evidence that won the support of the SPO project team; they also reinforced assumptions that SMS could provide an effective communication channel based on the wide access that users had to mobiles in the area.
Recommendation: It is advisable to conduct preliminary research to ensure the design of the solution is based on the needs of the end users and the aims of the project's stakeholders.
- An important element of the program design was to introduce the numbering system, coupled with picture cards, face-to-face interaction and follow up phone calls. Bringing in the communities on the design process also provided them with a sense of ownership over the system. Although time-consuming, it was found that sending a team to the villages to raise awareness about the Complaints and Response Mechanism (CRM) was a very effective way of building trust and necessary for increasing usability of the system.
Recommendation: When there is a low level of literacy amongst beneficiaries, it is important to design a system that is accessible. It may be that SMS is not the ideal solution to use in every case. If there are strong justifications for using SMS it is important to adapt the approach to communicate effectively with different audiences.
- The Complaints and Response Mechanism (CRM) was effective in enabling beneficiaries to communicate their feedback discreetly. Ordinarily, beneficiaries might have had to log issues verbally through the village council or other third parties. This discouraged some beneficiaries from providing feedback. Although PEPL and SPO did retain these original complaints methods, they found the introduction of an SMS system helped to ensure maximum community engagement. When introducing the SMS feedback system, the team had to ensure that the internal response and feedback handling system was robust and secure enough to address feedback, whilst also protecting the identity of the person submitting the complaint as much as possible.
Recommendation: SMS can provide an intimate and discreet method of accessible communication. That said, there are some data integrity issues which should be considered transmitting data via SMS. You can find further information on this in the FrontlineSMS Data Integrity Guide (2011): <http://www.frontlinesms.com/user-resources/user-guide-data-integrity/>.
- The feedback requested from beneficiaries was in part intended to help ensure that SPO project staff and SPO's partner organizations could be held accountable throughout the distribution process. The staff and partner organizations were trusted, but needed some reassurance that the Complaints and Response Mechanism (CRM) was not simply a means through which the management could check up on them.
Recommendation: Ensure open communication with all stakeholders when introducing a new feedback mechanism in any project.

- Female community members were surveyed and engaged with to the same extent as male community members. Some women owned their own mobile phones, and during focus group discussions expressed excitement in being able to provide feedback directly without going through male family members. However, during the project the majority of complaints by females were still found to be sent by a male family member.

Recommendation: During a project with a longer inception phase it would be beneficial to discuss with the male members of the community the benefits of females providing feedback directly. Depending on resources, two separate phone numbers could be established, with one dedicated to women only. The response manager chosen to call back about these complaints would also be female, mitigating potential cultural concerns over women having conversations with men who are not family members. A demonstration of this process to the male and female members of the community might increase the amount of female engagement with the system.

This was a small-scale project designed to pilot the use of FrontlineSMS for a complaints and response mechanism. The purpose of giving people a direct means with which to register a complaint or feedback was to empower beneficiaries of the relief effort to have a say in the way they were treated. Furthermore the information received could help improve accountability of project staff, and improve efficiency of SPO programs over time.

Since the success of this pilot SPO has plans to build SMS complaints and response mechanisms into further projects, following the same participatory processes. As part of this planning, SPO are preparing to use FrontlineSMS to help monitor further aid distribution projects.

PEPL and Raabta are currently developing similar feedback mechanisms that use Interactive Voice Response (IVR) systems in addition to SMS, to further lower the barrier to community engagement during disaster response and early warning. Please get in touch with Alex Gilchrist at alex@pepl.org.uk for further questions about this particular project.

For further information on FrontlineSMS and how it can be used please visit www.frontlinesms.com or contact us on info@frontlinesms.com.