



The Climate Resilience
Measurement for
Communities (CRMC)

Using online data collection



About this document

As part of ongoing enhancements to the Flood Resilience Measurement for Communities (FRMC) and based on feedback received from implementing organizations, we have created the Climate Resilience Measurement for Communities (CRMC) and added a functionality that allows FRMC and CRMC users to conduct 'online surveys' as part of your data collection process to measure community resilience.

For household data collection, you can choose either to conduct online or the standard field worker-based data collection (but not both). For focus group discussions and key informant interviews, you can choose for every interview questionnaire ('bucket') whether you want to send field workers to the meeting or have the focus group leaders / key informants answer the questions via an online survey.

In this document, we provide some guidance on what to consider and outline some of the pros and cons of conducting online surveys for each of the data collection methods. For detailed technical specification of the online survey functionality, please refer to the official CRMC user guide – this guide does not replace reading the CRMC technical user guide to understand how the feature works at a technical level.

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¹ See: <https://floodresilience.net/blogs/advancing-digitalization-in-drr-and-development-programs-in-covid-19-times> for more details on how the coronavirus pandemic has compelled us to develop alternative methods and tools for community engagement.

To learn more about the CRMC and find out how it can add value to your programs, please email us here: info@floodresilience.net

Measuring climate resilience at community level

Why climate hazards?

As our planet warms and weather patterns change, we are seeing more frequent and intense floods, heatwaves and wildfires. The disruption caused by these events can devastate homes, disrupt communication networks and displace people. Heatwaves are one of the deadliest climate events. Without action on climate resilience, the position will get worse because of:

- Increasing population, urbanization, and economic development in hazard-prone areas.
- Increasing loss of life and economic and insured losses due to climate hazards.
- Increasingly interconnected and interdependent climate risks.

With climate disasters increasingly impacting communities around the world, the need for community resilience has never been greater.

Why resilience?

We find: Every US\$1 invested in prevention saves \$5 in future losses.²

But: Only 13 per cent of aid spending goes into pre-event resilience and risk reduction; 87 per cent goes to post-event relief.³

We define disaster resilience as the ability of a system, community, or society to pursue its social, ecological, and economic development and growth objectives, while managing its disaster risk over time in a mutually reinforcing way.⁴

Why measure?

Measurement enables us to assess and demonstrate the real impact of improvements. Since there was no global framework available to do this, the Zurich Flood Resilience Alliance originally developed a consistent [Flood Resilience Measurement Framework](#) and the tools to implement this framework, which now has progressed to the [Climate Resilience Measurement for Communities \(CRMC\) framework](#) and associated tools.

And, if we have a measurement framework and data, we can contribute to the evidence on how to define resilience. In turn, this will help to increase social, political, and financial investment in building resilience to climate-related hazards.

Why focus on communities?

While acknowledging that national and global drivers play a significant (and essential) part in building resilience, we have chosen to focus on the community level. This is the level where impacts from climate related hazard events are felt most immediately and where much action on enhancing resilience can be taken. It is also the level where we can demonstrate a tangible impact on people's lives, creating best practices in the field that can help us shape and influence policy at a higher level.

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- 2 Mechler, R., Czajkowski, J., Kunreuther, H., Michel-Kerjan, E., Botzen, W., Keating, A., McQuistan, C., Cooper, N., and O'Donnell, I. (2014) *Making Communities More Flood Resilient: The Role of Cost-Benefit Analysis and Other Decision-Support Tools in Disaster Risk Reduction*, White Paper, Zurich Flood Resilience Alliance.
- 3 Kellett, J. and Caravani, A. (2013) *Financing Disaster Risk Reduction: A 20-Year Story of International Aid*, London: ODI; Washington, DC: Global Facility for Disaster Reduction and Recovery at the World Bank.
- 4 Keating, A., Campbell, K., Mechler, R., Magnuszewski, P., Mochizuki, J., Liu, W., Szoenyi, M., and McQuistan, C. (2017) 'Disaster resilience: what it is and how it can engender a meaningful change in development policy', *Development Policy Review* 35(1): 65–91 <<http://dx.doi.org/10.1111/dpr.12201>>.

The Climate Resilience Measurement for Communities

The Climate Resilience Measurement for Communities (CRMC) comprises two parts: the Alliance's conceptual **framework**⁵ for measuring community resilience to a set of climate-related hazards, and an associated tool for implementing the framework in practice.

The second component of the CRMC – the **tool** – is a practical hybrid software application comprising an online web-based platform for setting up and analysing the process and a smartphone- or tablet-based app that can be used offline in the field for data collection.

In this publication, we guide you through **using the online survey functionality in steps 5-7 of the CRMC process.**

The CRMC process is often part of a wider community disaster resilience programme and does not stand alone. Certain parts of the process such as project set-up and community engagement are meant in the wider sense of the community project, and not just about implementing the measurement using the CRMC.




After the flood, Lima, Peru. © Fidel Carrillo

⁵ For more information on the conceptual framework, please see the FRMC overview: <https://floodresilience.net/resources/item/the-climate-resilience-measurement-for-communities-crmc/>


The CRMC process




The CRMC tool




- Set up measurement activities.
- Select data collection methods.
- Assign them to fieldworkers' smartphones.




- Collect data based on assigned methods.
- Store the data offline.
- Send the data to the web application when the job is completed.



- Consolidate all data for the assessment.
- Assign grades using the assessment methodology.



- Visualize and analyse the measurement results.
- Access guidance on how to interpret the results.



- Store the resilience measurement results for comprehensive analysis and validation.



Online surveys and community engagement

Online survey functionality for household surveys, focus group discussions, and key informant interviews have been made available in the CRMC as an additional data collection option. It is important to note that conducting an online survey does not in any way replace community engagement, which is essential for the success of the CRMC process.

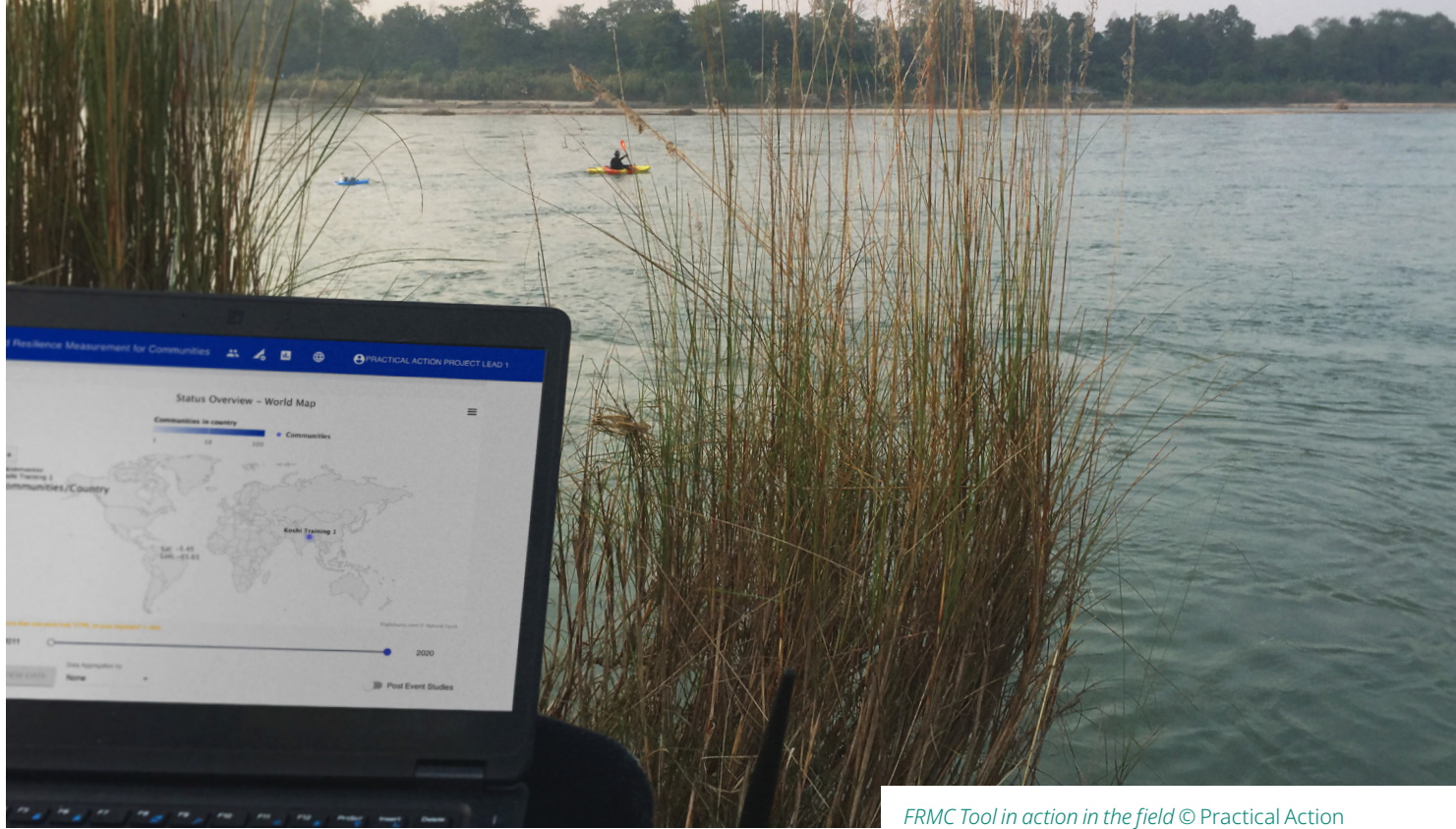
Online surveys are a replacement for field worker in-person data collection; they are not a replacement for community engagement. Community engagement should begin long before any surveys are sent out because users need to have solid knowledge about the community in order to design a good survey. Remotely conducting an online survey is not the equivalent of community engagement.

Online household surveys

Before deciding to use the online survey platform for household survey data collection you need to be able to answer ‘yes’ to the following questions:

- Will we get enough respondents to reach the minimum number of household surveys needed?
- Do we have access to enough community members’ email addresses or have a plan to get these?
- Do we have a plan to get individual survey links to community members? (See ‘How will you access community members’ email addresses?’ below.)
- Do we know the target community well enough to be able to access a cross section of the population (people from different groups within the community)?
- Will the online respondents be able to answer the questions without any real-time support?
- Will we be able to prepare each respondent before they complete the survey, so they understand enough to be able to respond to the questions?
- Are online surveys culturally appropriate and a trusted means of gathering information?

Response rates are very low: The average email survey response rate in developed countries is approximately 15 per cent. This means for every 100 survey-links you send out, you may only get 15 responses (see tips for increasing response rates below). Response rates may be even lower in developing countries. Response rates may be higher if your respondents know to expect the survey.



FRMC Tool in action in the field © Practical Action

How will you access community members' email addresses? Here are a few ways you might get access to the community members to undertake an online survey:

- Physically collect email addresses at community events.
- Promote/advertise the study on posters around the community and in community media (for example, local newspapers, social media like Facebook, etc.). Note, you must not advertise individual survey links publicly as they are not intended for multiple use. Instead, you should advertise an email address that potential respondents can contact where you would then send them an individual survey link.

This is by no means an exhaustive list; you are free to come up with other ways to access email addresses, subject to local data laws. Remember that it is best if your respondents opt-in to receive the survey link because then they are expecting it, and this increases response rates.

The CRMC also requires that all household survey respondents be living in the community. Consider how you will ensure that they actually live within the correct locale as per the definition for the community you are studying.

Your email may end up in the spam folder: See Appendix A for tips on how to avoid your email going to the spam folder.

How will you access vulnerable groups? In many communities, the most vulnerable groups likely will not speak the local language. They also may not have access to the internet or a computer, or may not be able to use a computer. If this is a concern, then do not use the online household survey option because your CRMC data will be biased.

Providing support: One of the key considerations is also whether you think participants are able to understand what's asked of them and can fill in the survey independently, i.e. when no field worker or other support person is physically present to provide support or answer any questions that might come up. More on this in the corresponding section below.

Focus group discussions

The online survey function for focus group discussions can be used when a field worker is unable to attend the focus group discussion in person. Online focus group discussions are filled out by the focus group while they are together but on one device. This means you need to discuss with the organizers/leader beforehand.

Before selecting an online focus group discussion, you should be able to answer 'yes' to the following questions:

- Does the focus group leader have access to a reliable internet-enabled device?
- Is the focus group leader comfortable reading the questions and inputting the answers?
- Are you confident that you can provide the focus group leader the support they need in order to be able to facilitate the discussion (see key points below)?
- Is the focus group leader able to be impartial when inputting the answers? In other words, do you trust that they will put in the answers of the group rather than their own opinion?
- Will the focus group understand the questions without your support?

Provide the focus group with clear instructions. You will send the online focus group survey link via email to the focus group leader. It is important that you include all relevant information in this email, such as the definition of community, the relevant hazard(s), etc., as well as instructions on answering the questions. If possible, offer to have a phone conversation with the focus group leader before the focus group discussion.

Instruct the focus group leader to have a discussion about the issues before answering the question. As with field-worker-run focus group discussions, the CRMC focus group data collection method relies on group discussion rather than simply answering the questions. It is important that focus group leaders facilitate discussions about the topics raised by the questions in the survey before inputting answers.

Instruct the focus group leader to ensure everyone gets a say. Provide the focus group leader with some tips for running the focus group to ensure that all participants have an opportunity to put their views forward. As experts in group facilitation, you and your team should be able to provide locally appropriate tips.

Key informant interviews

There are two ways of using the online survey feature with key informant interviews:

1. If you have an established relationship with the key informant and you are confident that they would be comfortable filling in the online survey, you can send them an email explaining the purpose and the survey link. The advantage of this approach is that the respondent can take their time to consider and complete their answers. The disadvantage is that you do not gather the fuller information that you do in an in-person or live phone discussion. To help mitigate this, you could also offer to answer any queries they might have either via email or a phone call.
2. Alternatively, you can use the survey link for this key informant survey yourself and fill in the answers based on a phone interview with them, i.e. you set up a phone, video, or conference meeting then take them through the questions verbally. The advantage of this approach is that you can have a fuller discussion with the key informant. The disadvantage is that you are interpreting the respondent's answers rather than them inputting the answers directly.

Study preparation

Just like when using field worker data collection, there is much preparatory work and community engagement that occurs before data collection. **This preparatory work is where users and communities jointly decide:**

The boundary of the community – which areas and groups are part of the community?

- The boundary of the community – which areas and groups are part of the community?
- For each hazard, the risk and process type.
- How and where natural capital is used for resource management.

In addition to jointly deciding the above points, the purpose and details of the study, including the online data collection, must be clearly communicated to all the targets of the online survey and steps taken to ensure they understand this information.

Study set-up

Here we describe how to do study set-up for online household, and for focus group and key informant interviews. It is important to note that **local questions can also appear in online surveys**.

Study set-up for online household surveys

If you select the online survey option for household surveys, then you can only use this option for household surveys; in other words, you cannot use both field worker household surveys and online surveys in the same study. Online surveys can be completed by respondents on an internet-enabled device or via telephone surveyors who ask respondents the questions over the phone and input their answers into the system.

In the study set-up screen, switch to 'Work Assignments'. In this tab, you assign how the information will be collected for each data collection method. For household surveys, you can choose whether the entire set will be done using enumerators/field workers or online survey, but you cannot mix and match here.

Resilience Sources		Work Assignments			
Household	Focus Group	Key Informant	2nd Source		
<input checked="" type="checkbox"/> Online Survey	Expected return ratio: 25%	0%	100%	<input type="checkbox"/>	
<input type="checkbox"/> Ansel Adams		0		<input type="checkbox"/>	

Study set-up screen – using the slider to set the expected return rate for online HH surveys

Study set-up for key informant and focus group interviews

If you select online survey for focus group discussions and/or key informant interviews, you are able to combine traditional field worker-based, on-site data collection with the remote, online surveys. For each 'bucket' or individual questionnaire that you assign to a particular focus group or key informant interviewee, you can choose separately whether this interview is conducted using the online feature or not.

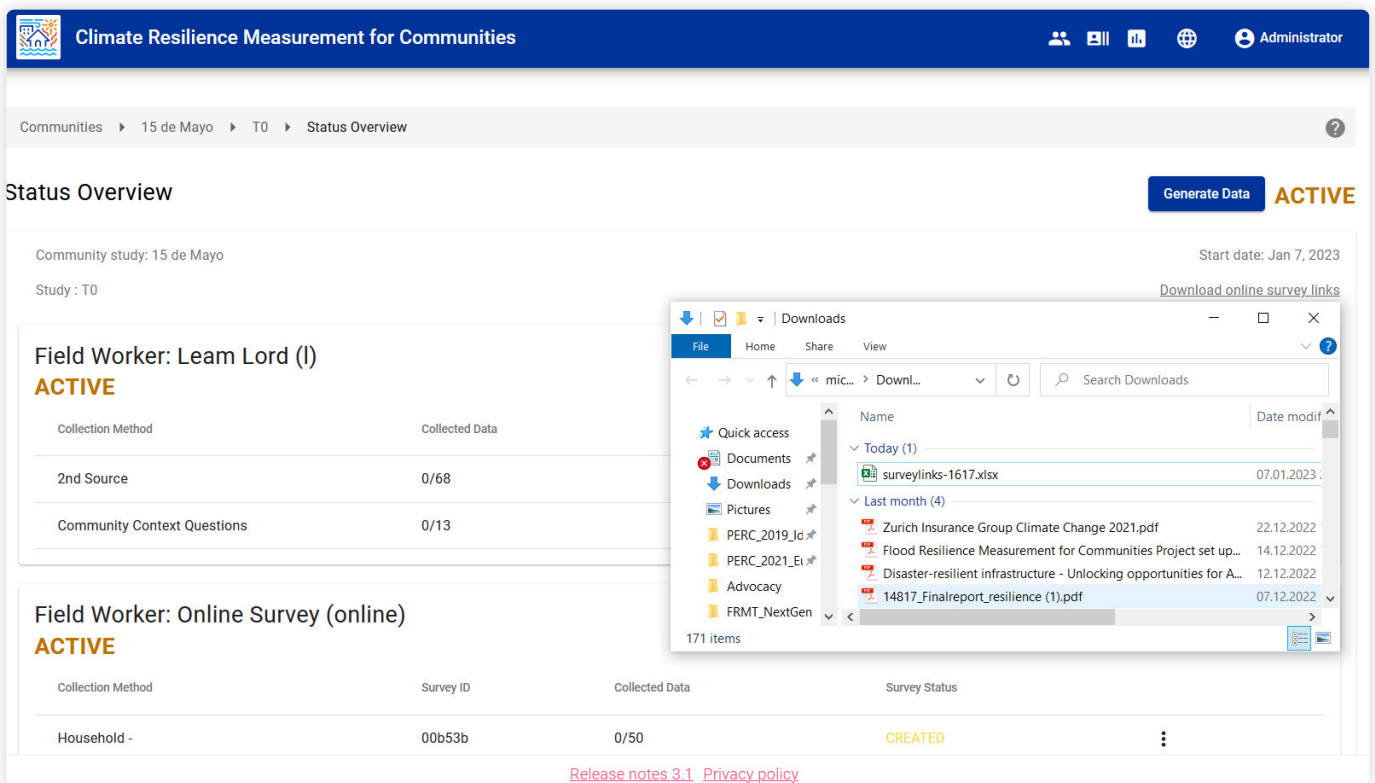
The screenshot displays the 'Climate Resilience Measurement for Communities' interface. At the top, the title and 'Administrator' user are visible. The 'Name of Study' is 'TO' and 'Number of household interviews' is '90'. A green notification states: 'Well Done! You can be confident (with a 99% probability; +-1 % variation) that the results of the household survey represent the community preferences.' The main area is split into 'Resilience Sources' and 'Work Assignments'. Under 'Resilience Sources', the 'Focus Group' tab is active, showing a list of sources: Community council, Community recreational groups, Housing association, Local government committee, and Society. A dropdown menu is open for the 'Focus Group' category, showing options: Online Survey, Ansel Adams, Bridgitte Bardot, Claudie Cardinale, Danny DeVito, Online Survey, and Erika Eleniak.

Study set-up screen – assigning work using the online surveys for focus groups

Data collection

Once you have finalized your study set-up including online survey, the CRMC system will generate individual survey links that you can then email to respondents and/or provide to telephone surveyors. It is the local project lead’s responsibility to retrieve the URLs providing access to the online surveys through the active study status screen, and manage the allocation of respondents to each survey. This will be conducted outside of the CRMC through your organization’s own data management process using Excel sheets, databases, or other means.

The CRMC provides an Excel list of all survey links created when the study was activated. Click ‘download online survey links’ in the study status overview of an active study to download the URLs. Follow the guidance provided below on handling online surveys and to learn what to consider in terms of information that should be sent to the respondents alongside the URL; how to obtain lists of potential respondents; how to ensure data quality and security; how to ensure you know who has received which URL, and so on.



Active study – using the status overview screen to download the online survey links

The following conditions apply to online surveys:

- Each URL generated is for a single online survey respondent – one householder, focus group or key informant per URL only! If the same URL is shared with more than one person or group, they will access the same individual survey. Ensure that URLs are not shared beyond the respondent who should receive it or who is responsible for entering the answers (in the case of focus group discussion leaders).
- Online surveys are active for 30 days after the study has been initially activated and the survey link been created. After that time, they will automatically expire and show a corresponding error message should the link be accessed after that time. You can generate more survey links by navigating to the household status overview in your 'Active' study status. These will expire 30 days after you create them.

The screenshot displays the CRMC interface for a field worker named 'Leam Lord (I)'. The interface is divided into two main sections: 'Field Worker: Leam Lord (I)' and 'Field Worker: Online Survey (online)'. The 'Field Worker: Leam Lord (I)' section shows a table with columns for 'Collection Method' and 'Collected Data'. The 'Field Worker: Online Survey (online)' section shows a table with columns for 'Collection Method', 'Survey ID', 'Collected Data', and 'Survey Status'. A dropdown menu is open on the right side of the 'Field Worker: Online Survey (online)' table, showing options: 'Review Upload', 'Generate Household Links', and 'Close Survey'. At the bottom of the interface, there are links for 'Release notes 3.1' and 'Privacy policy'.

Collection Method	Collected Data
2nd Source	0/68
Community Context Questions	0/13

Collection Method	Survey ID	Collected Data	Survey Status
Household 2	cc5fdd	50/50	COMPLETED
Household 3	8d887d	50/50	ACCESSED
Household -	00b53b	0/50	CREATED
Household -	00f128	0/50	CREATED
Household -	01412f	0/50	CREATED
Household -	01d48b	0/50	CREATED
Household -	023afc	0/50	CREATED

Study set-up screen – assigning work using the online surveys for focus groups

You are responsible for identifying potential respondents and getting their email addresses. You must be very clear on the boundaries of your community (established in the preparation phase) and ensure that all email addresses belong to people who live within the community and that they answer the questions based on what they know about that community.

In the 'Review Uploads' screen, you will be able to track how many surveys have been completed and what the status of each survey link is – e.g. whether it has been accessed yet or not, has been cancelled by the participant, or completed.

Fieldworker: Online Survey (online) ⋮

ACTIVE


Collection Method	Survey Id	Collected Data	Survey Status	
Focus Group - Community productive users group	694ee9	0/9	CANCELLED	⋮
Key Informant - Budget/Finance official	e06324	7/7	COMPLETED	⋮
Household 1	3b0b8b	2/20	ACCESSED	⋮
Household 2	9162a8	2/20	CANCELLED	⋮
Household 3	be1478	2/20	CANCELLED	⋮
Household -	761125	0/20	CREATED	⋮
Household -	cee716	0/20	CREATED	⋮


Active study – using the status overview screen to monitor the status of online survey links

The survey includes a standard CRMC introductory page at the start and thank you page at the end (text below). All additional information specific to your programme must be included in your email with the link or by telephone surveyors (see 'What to include in your introductory email or phone call to householders' section below for tips on what to include).

Survey start page

The following text will appear when the respondent clicks the online survey link. Text is adapted to household survey, focus group interview, and key informant interview; shown here is the household survey introductory page for a Red Cross community called '15 de Mayo':

**Climate Resilience Measurement for Communities**



Thank you for taking the time to complete this survey on floods and heatwaves resilience in community HeatFloodColombia. We truly value the information you have provided. Your responses will contribute to a better understanding of the strengths and the needs of this community. As part of their analysis and work process, Organization Red Cross will review all the information and discuss opportunities and next steps with various stakeholders of the community.

Language
English

Cancel Participation

Dear Madam or Sir,

During the time of 2022-03-19 and 2022-04-18, Red Cross are conducting an online survey. This is part of a wider floods and heatwaves resilience program that aims to help communities become more resilient to floods and heatwaves.

The objective is, based on your input, to better understand how resilient HeatFloodColombia is to floods and heatwaves, and to better learn about the community's needs and strengths.

This online survey is meant to get information and opinion from a group of people living and working in or with this community. Typically, such a focus group discussion is moderated by a discussion lead familiar with the topic. This person may be from within the focus group or from outside of the group. This online survey is only meant to facilitate the data collection for the person entering the group's answers into the system but should not limit the type or nature of the discussion held.

In focus groups, often, participants work together on an activity. This process will help gather all the different information that participants hold, as well as understand what differences of opinion there are and why. This is important for community resilience beyond simple questions and answers. Focus groups also tend to bring topics to attention that otherwise would go unnoticed.

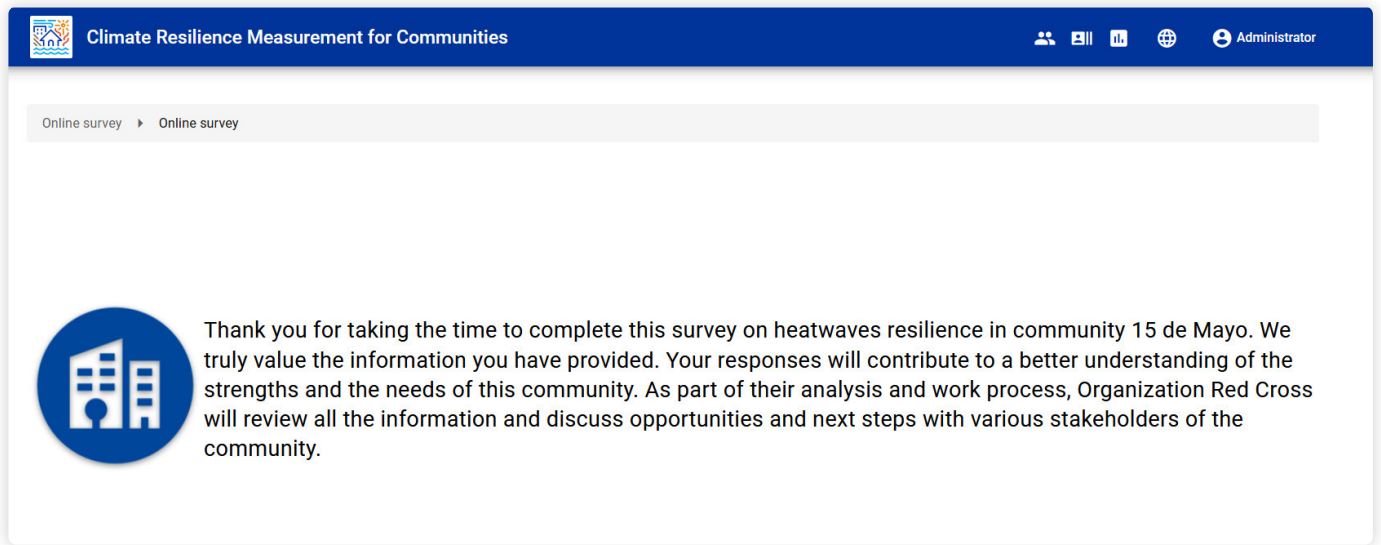
The participation in the focus group discussion is voluntary and anonymous. All the data provided by the survey is analyzed without the ability to link any individuals – names or addresses or any other personal information – with the information provided in this survey. However, to better understand the nature and function of this focus group, a few context questions will be asked at the beginning of the survey.

The questionnaire covers up to eight areas – the context questions mentioned above and up to seven thematic areas of floods

Online survey start page

Survey end page

The following text will appear when the respondent finishes the survey. The link will then be closed, i.e. the same survey link cannot be used again, and the status overview changes to 'completed' for this individual survey.



The screenshot shows a web interface for 'Climate Resilience Measurement for Communities'. The header is dark blue with the organization's logo on the left and navigation icons (users, messages, documents, globe) and the role 'Administrator' on the right. Below the header is a breadcrumb trail: 'Online survey > Online survey'. The main content area features a blue circular icon with a white building silhouette on the left. To the right of the icon is a thank-you message: 'Thank you for taking the time to complete this survey on heatwaves resilience in community 15 de Mayo. We truly value the information you have provided. Your responses will contribute to a better understanding of the strengths and the needs of this community. As part of their analysis and work process, Organization Red Cross will review all the information and discuss opportunities and next steps with various stakeholders of the community.'

Online survey final page with thank you

Online household survey dissemination tips

There are several ways that you can disseminate the individual survey URLs to your respondents. The most direct method is to get a list of their email addresses (discussed above) and email them the individual URLs. If you need more email addresses than you currently have, then you might also consider the following dissemination options.

Set up a web-page with information about the survey. This web-page, likely within your organization's website, would include some information about the study and encouragement for community members to take part. It would then include an email address and phone number that interested community members can contact to take part. When potential respondents email or call, they can then be issued with an individual URL generated by the tool as described above.

Spread the word among your network. Use traditional and social media to let people in the community know about the project and the survey. You might link to a web-page about it if you have one or directly provide an email address for getting an individual survey link in your post/ad.

Print and disseminate flyers/pamphlets. In order to increase reach, consider printing flyers or pamphlets about the project and the survey and distribute them at appropriate events or venues. Be sure to include both an email and a phone number, as not everyone will have computer access.

Using phone surveys

The CRMC online survey functionality can be used by a phone surveyor. The phone surveyor asks the questions in the online survey and then inputs the answers given by the respondent. Phone surveys can be done by user organization staff/volunteers, or a phone survey company can be hired. Pros and cons of using a phone survey are listed below.

Pros of using a phone survey:

- Like field workers, phone surveyors can be trained/briefed on the meaning of the questions so that they can help explain them to respondents.
- Phone surveys usually have a higher response rate than online surveys.
- Phone surveys can potentially reach groups that speak different languages by conducting the survey in that language.
- Phone surveys can reach groups who do not have computer access and/or are not comfortable using online tools, such as the elderly, or who are not able to read (because of disability or illiteracy).

Cons of using a phone survey:

- Phone surveys are more time consuming.
- Phone surveyors need to be trained to some degree.
- Phone surveys are more expensive than online surveys.
- Similar challenges in terms of getting phone numbers from community members.

It would be possible to have some respondents complete the online survey directly while others are contacted via a phone survey. Simply allocate some URLs to respondents whom you contact via email as described above, while others are used by a phone surveyor who conducts phone surveys and fills in the online survey on the respondent's behalf.

What to include in your introductory email or phone call to householders

The email (or any other form of communication) you send to respondents with the survey link, or the opening introduction in a phone survey, should clearly cover the following:

- who you are;
- what you are doing;
- why you would like them to fill out the survey;
- that their answers will be anonymous;
- how their answers will be used;
- approximately how long it will take to complete the survey (you can find this out when you pilot test your survey);
- the survey link;
- what will happen when the survey is finished (commit to sharing results);
- why they should care about contributing to the survey;
- the boundary of the community; and that respondents must live within this community;
- what is meant by each hazard used for the study, such as heatwaves or flood and flood resilience for their community;
- What "Land use planning" and "Resource management" mean in their community;
- who to contact for further information and how;
- opt-out / unsubscribe option (see Appendix A below).

We have developed the following text that can be used as a guide:

Dear *[community member name]*,

I am *[your name]* from *[name of your organization]*, and I am writing to ask for your help in building resilience to *[name hazards]* in *[community name]* by filling out a survey. The answers to the survey from *[community name]* community members such as yourself will help us to measure *[community name's]* resilience to *[name hazards]* and inform future investments.

[Community name] faces devastating *[describe hazard types and typical return periods]*. The *[name hazard type and event description]* in *[worst event in recent years]* was especially bad. By helping us fill in this survey, you are not only sharing your local knowledge, you will also be helping the community explore what are the best options for building disaster resilience. Building disaster resilience means *[community name]* will reduce its *[name hazards]* and be better prepared for *[name hazards]*.

All answers are completely anonymous – we do not collect any identifying information such as name, address or your computer's IP address. The survey will take about *[estimated # minutes]* to complete.

To complete the survey, please click this link: [\[individual survey link here\]](#)

***[Community name]* refers to all areas which has the zip codes *[XXXX, YYYY and ZZZZ]*. It extends from the *[west boundary]* to the *[east boundary]* and from the *[south boundary]* to the *[north boundary]*.**

If you have any queries or would like to stay updated about our disaster resilience work in *[community name]*, please reply to this email/send an email to *[your email address]*.

Kind regards,

[Your name]

[Your role]

[Organization name]

[Organization address]

If you do not want to receive emails about this project, please email [\[unsubscribe@yourorganization.org\]](mailto:unsubscribe@yourorganization.org).

Tips for increasing household online survey response rates

The average email survey response rate in developed countries is approximately 15 per cent. This means for every 100 survey-links you send out, you may only get 15 responses. It may be even lower for developing countries. The following tips may help you increase your response rate.

Make sure potential respondents expect the survey. Respondents are more likely to complete the survey if they are expecting to receive it. This might be because respondents provided their email address after a discussion about the survey, via a web-link where they can opt-in or similar.

Keep the survey length 10 minutes or less. Surveys longer than 10 minutes have a significant abandonment rate – this is where respondents start the survey but do not complete it. Make sure you pilot the survey with colleagues before finalizing it.

Send the survey links out on Monday, Friday, or Sunday. Highest open and click rates occur on Mondays, Fridays, and Sundays.

Consider using incentives. Incentives improve response rates by 50 per cent on average. Incentives include direct payment or 'thank you gifts' such as a gift card, donations on the respondent's behalf, or the chance to win a prize. While incentives can be useful for increasing response rates, it is important to consider whether they are appropriate for your organization and the purpose of the FRMC study. It is important to note that participation in field worker household surveys (the face to face version of this exercise) is based on community engagement and the desire to contribute to the improvement of the community. Also using incentives may create expectations that involvement with your organization will be paid.

Support considerations when using online surveys

When quite detailed information is asked for resilience purposes, it makes a difference whether a field worker is present physically during the interview to gauge the comfort level of participants, how well they understand the questions, and to provide guidance and support. In online surveys, this immediate support is not available, and alternatives need to be considered. Remote support should be offered – answering questions the participants might have via chat, email, or phone. Alternatively, you could walk a key informant through the online survey by conducting it as a phone interview as well as mentioned above.

To provide further support, we also completely rewrote the additional guidance notes accompanying the questions to provide the necessary context for this particular online survey situation. This included shifting the perspective from providing guidance to field workers who might need additional information during field surveys (the (i) information button on the field worker’s mobile app) to ensuring the guidance now directly speaks to the online survey participant. That meant choosing different words and trying to anticipate questions that might come up so they could be answered already in the guidance notes. Some of these features included additional context for an online survey participant to anticipate any questions they might have to better understand the question, rephrasing/ simplifying the guidance notes, or introducing a feature to not immediately display answers where participants should reflect first before being prompted by a series of answer options.

The screenshot shows a web-based survey interface. At the top, there is a blue header with the logo and text 'Climate Resilience Measurement for Communities'. On the right side of the header, there are icons for user profile, print, share, and a globe, along with the text 'Administrator'. Below the header, there is a language selection dropdown menu set to 'English' and a 'Cancel Participation' button. The main content area is titled 'Life and Health (Heatwave)'. It contains two survey questions, each with five radio button options: 'Strongly agree', 'Agree', 'Have no opinion', 'Disagree', and 'Strongly disagree'. The first question is: 'I know which characteristics and activities make people more vulnerable to heatwaves. Do you strongly agree, agree, have no opinion, disagree, or strongly disagree with this statement?'. The second question is: 'I would know how to stay cool and prevent heat-related illness in myself and others during a heatwave. Do you strongly agree, agree, have no opinion, disagree, or strongly disagree with this statement?'. At the bottom of the survey area, there are two links: 'Release notes 3.1' and 'Privacy policy'.

Sample screen of a theme page from the online survey

Appendix A

Tips for avoiding your email ending up in spam

Email service providers such as Gmail and Outlook have rigorous spam filtering. Unfortunately, emails about the FRMC survey may end up in potential respondents' spam folders. Follow these tips to help avoid your survey link ending up in the spam folder and increase your response rate.

Get permission to email. Never buy a list of email addresses (this is illegal in some countries), instead get your respondents' permission to email them.

Have a clear subject line. Some email users will mark your email as spam if it is not obvious that it is not, and this will increase the chances that the email provider considers all of your email spam. Also, people don't like being tricked into opening an email.

Include a physical address. It is illegal in some countries to send an email like this and not include a physical address. Including a physical address also helps to show the email provider that the email is from a real organization.

Provide an 'unsubscribe' option. Respondents have the right to be removed from your mailing list. This can be as simple as 'reply with UNSUBSCRIBE to be removed from our mailing list'.

Don't use spam trigger words. Spam filters are triggered by certain words in the subject line or body of the email, these include:

- amazing
- cancel at any time
- check or money order
- click here
- congratulations
- dear friend
- for only (\$)
- free or toll-free
- great offer
- guarantee
- increase sales
- order now
- promise you
- risk-free
- special promotion
- this is not spam
- winner

Follow HTML best practices. If you are sending your email with logos or pictures, remember to keep them small and don't use too many. Don't use obscure fonts and make sure your emails are readable on mobile devices.



The Climate Resilience Measurement for Communities (CRMC)

For more information visit floodresilience.net or follow [@floodalliance](https://twitter.com/floodalliance) on social media.

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Man by a river gauge, Nepal. © Practical Action

Intellectual Property note:

- a) The Climate Resilience Measurement for Communities (CRMC) has been developed as a product of the Zurich Flood Resilience Alliance (the Alliance) and consists of 1) the measurement framework and associated materials, 2) a hybrid online and mobile app-based software tool, and 3) the data the measurement generates.
- b) The CRMC framework and associated materials were developed by organizations working through the Alliance. The framework and associated materials are the joint intellectual property of the Alliance. Materials pertaining to the CRMC may be used and reproduced freely for research and non-profit purposes only.
- c) The software: Zurich Insurance contracted and paid IBM to develop and maintain the CRMC software, and hence Zurich owns the IP that is the software and associated technical guidance. Use of the software may be provided for non-commercial purposes only.
- d) The data: All data are collected in accordance with ethical data collection practices, and are anonymous at the individual and household levels. The data within the tool ultimately are controlled by the organizations that collected it. As a condition of using the framework, all organizations have agreed that data will be stored in a central database and be used for research purposes following the signing of an access agreement that Zurich is managing.
- e) Use-rights: The Alliance are keen for the CRMC to be used as widely as possible, within the time-frame of the current phase running until 2023. Existing partners are encouraged to expand use of the tool within the remit of the Alliance. The Alliance invites expressions of interest by new organizations wishing to use the CRMC by filling out an access request.

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