Margaret A.Cargill
PHILANTHROPIES

Context Counts:

cultivating community disaster preparedness amid complexity

A learning partnership with
IRMA and EnCompass

Acknowledgements

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Mercy Corps
Oxfam

Table of Contents

Table of Exhibits

Acronyms

CRS	Catholic Relief Services
DEIJ	Diversity, equity, inclusion, and justice
DRC	Disaster-Ready Community
DRG	Disaster risk governance
DRR	Disaster Risk Reduction
DRR-I	Disaster Relief/Recovery, International
EEF	Equitable Evaluation Framework
EL	Evaluation & Learning
IRMA	Integrated Risk Management Associates
KII	Key informant interview
LWR	Lutheran World Relief
MACP	Margaret A. Cargill Philanthropies
SLR	Secondary Literature Review
TOC	Theory of Change
USAID	United States Agency for International Development

Executive Summary

Introduction

Background & Research Questions

This summary presents the results of a study conducted by Integrated Risk Management Associates (IRMA) and EnCompass LLC, on behalf of the Margaret A. Cargill Philanthropies' Disaster Relief and Recovery Program, International (MACP). To maximize programming impact, MACP, its grantees, and their partners at the community level need to know how to position preparedness interventions so local actors can leverage their unique capacities and circumstances to improve preparedness in ways that suit specific local conditions. This study explored how context – in all its complexity – affects community-level disaster readiness. Specifically, this report was framed around one overarching research question and three related sub-questions:

Question: What contextual factors foster community disaster readiness?

1. What contextual elements in complex systems are most likely to enable or disable community disaster readiness?
2. What context descriptors show important trends in enabling/disabling preparedness?
3. How can MACP programming influence contexts in pursuit of sustainable results?

Analytical Framework & Methods

The communities that MACP-funded preparedness projects aim to support are embedded in Ecological, Industrial, and Human Systems, each of which influence, and are influenced by, grantee-led projects. Each of these systems comprise many contextual elements, which vary widely in different places. This study inventoried these elements, prioritized them by their influence (positive, negative, neutral) on community-level preparedness, and examined how they interact to promote sustainable change.

Elements of Complex Systems

Ecological System & Hazards
Multi-risk contexts, environment & natural resources, natural hazards, (intensity,-frequency, & extensiveness), geological hazards, biological hazards, technological hazards, conflict

Industrial System
Energy, economic, communication & information, market access, infrastructure

Human System
Government: (political dynamics, legislation, national/local disaster risk governance, application of laws)

Community: (awareness & learning, social systems, cultural dynamics, DEIJ)

Individual: (health & disability, age, income, gender, education level)

Findings & Conclusions

To conduct the study, the research team collected and analyzed both qualitative (key informant interviews and open-ended survey questions) and quantitative (survey responses) data, while also carrying out a systematic review of documents and reports related to community preparedness.

The research team brought the preliminary results of the data analysis process to the MACP team, to refine the initial findings and begin to co-create conclusions together. The research team then engaged MACP grantees in Asia and Latin America in making sense of the draft findings and conclusions, and facilitated the participatory development of recommendations. Grantees' comments and insights have been integrated into the final version of the study presented here.

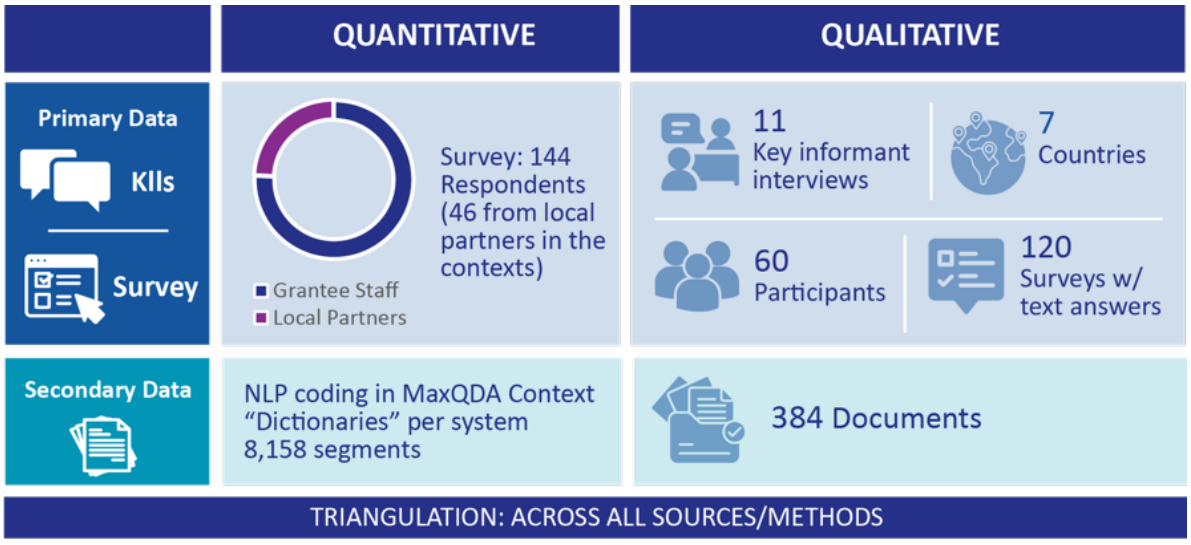
Eleven findings and four overarching conclusions emerged from the study.

Findings

Question 1: What context elements in complex systems are most likely to enable community disaster readiness?

1. Overall, context elements in the Human System influence community preparedness the most.
2. Disaster risk governance, the prominence of hazards in community experience, and communication and information have the strongest influence on preparedness.
3 Awareness and learning surfaces as the most en.abling context element; natural resources are the most disabling.
4. The prominence of hazards is a key enabler of preparedness.
5. Awareness and learning enable preparedness the most. Poverty is most disabling.

Data streams and methods



6. Communication and information most enable preparedness, while market dynamics disable it.

Question 2: What context descriptors show important trends in enabling preparedness?

7. Contexts are hard to separate from geography and politics. A context that disables in one setting may enable in another.
8. Context elements are highly interconnected and two or more occurring together strengthen their influence.

Question 3: How can MACP programming influence contexts in pursuit of sustainable results?

9. MACP grantees consistently design their projects to leverage or mitigate key aspects of context, and sometimes use adaptive management.
10. Disaster risk governance is conducive to sustainability.
11. Income, community awareness and learning, and strong social systems foster sustainability.

Conclusions

1. Out of sight, out of mind; the prominence of hazards in the community consciousness strongly influences preparedness.
2. If a vibrant economy and functional communication systems exist, people will prepare themselves.
3. The weight of governance in many forms (local, national, legislation, and the application of those laws) are critical enablers of preparedness and sustaining preparedness.
4. Understanding the complexity and specificity of each context is crucial for effectiveness and sustainability. Context should be proactively monitored and adaptively managed.

Recommendations

Finally, the evidence suggests five recommendations, each of which applies to funders and implementers focused on disaster preparedness:

1. Promote and insist on context analysis and context monitoring in every preparedness effort.
2. Select communities for preparedness programs carefully--with attention to probability of multiple hazards, especially when resources are limited.
3. Routinely include or promote a livelihood, income-generating effort for preparedness communities.
4. Actively recognize and promote the importance of disaster risk governance (system-wide) for sustainable preparedness outcomes.
5. Plan to manage community preparedness projects and actions adaptively, based on inclusive monitoring systems and flexible approaches. Consider design to be not only a crucial first step but also an iterative, ongoing process.

Context Counts: cultivating community disaster preparedness amid complexity

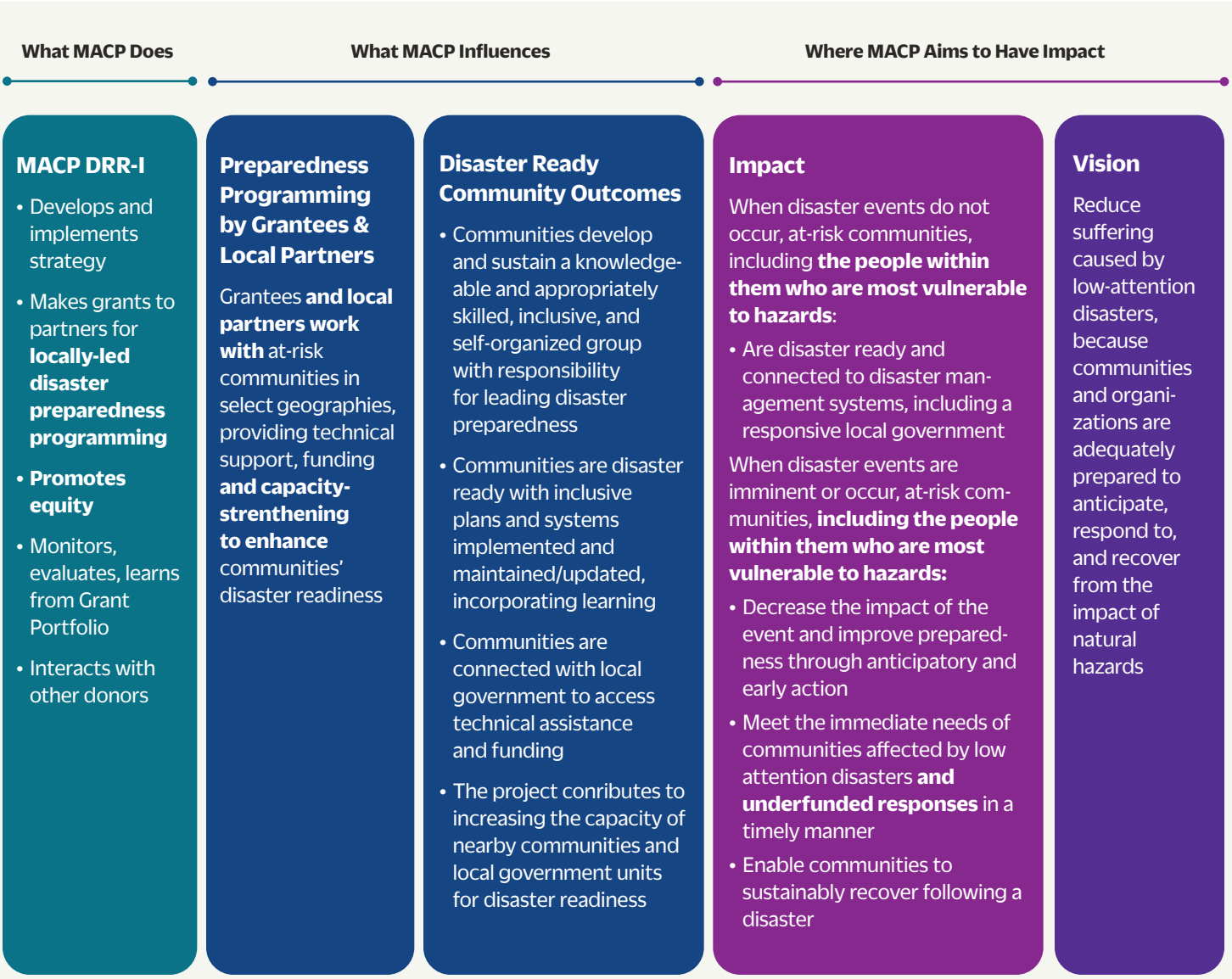
Introduction

This paper presents the results of a study conducted by Integrated Risk Management Associates (IRMA) and EnCompass LLC (the Evaluation and Learning Partner) on behalf of the Margaret A. Cargill Philanthropies' Disaster Relief and Recovery Program, International (hereafter, MACP). The Evaluation and Learning (EL) Partner regularly produces research and evaluation products that are intended to help MACP, its grantee partners, and others working in the disaster relief and recovery (DRR) sector use evidence to improve disaster preparedness, and strengthen at-risk communities' capacity to withstand and sustainably recover from disaster events.

MACP and its partners work in complex systems in hundreds of communities throughout Central America and Asia and the Pacific. Each community is unique, confronting a distinct, dynamic set of hazards while being affected and shaped by a plethora of interacting contextual factors. This means that a disaster preparedness project that might contribute to preparedness outcomes in one community could actually diminish preparedness efforts in a different community.

To maximize programming impact, MACP, its grantees, and their partners at the community level need to know how to position preparedness interventions in particular settings, so local actors can leverage their unique capacities and circumstances to improve preparedness in ways that suit specific local conditions. Understanding the role and influence of context, both in and across complex systems, is essential for creating the disaster-ready communities envisioned in the MACP Theory of Change (TOC) **(Exhibit 1)**.

Exhibit 1: MACP Theory of Change



Objectives & Research Questions

This study sought to explore how context—in all its complexity—affects community-level disaster readiness. Specifically, the research is framed to accomplish two objectives:

1. To map the contextual elements that influence the disaster readiness of communities engaged in MACP-funded preparedness programming; and
2. To examine the nature of context elements and the degree of influence they have on preparedness.

To deliver on these objectives, we explored one overarching research question and three related sub-questions **(Exhibit 2).**

Guiding Principles

MACP and the EL Partner both strongly support and are making efforts to implement the Equitable Evaluation Framework (EEF).[1] We believe that research and evaluation initiatives should advance equity, be oriented toward participant ownership, and engage critically with context and complexity.

Leveraging these commitments, we engaged MACP and grantees in a series of co-creation conversations and workshops in 2022 and 2023 to develop the objectives and research questions presented above. During these conversations, participants also worked together to develop several core principles to guide the research. These include:

1. **Focus on Users and Use:** The study focused on generating evidence and lessons that MACP and other users—especially grantees, but also their partners and others throughout the world working in support of community disaster readiness—would be able to use to strengthen their disaster preparedness work.
2. **Start from Strengths:** The research applied EnCompass' hallmark Appreciative Inquiry approach. Intentionally building trust with participants and initially focusing on what has already worked, the research team encouraged open sharing about successes and challenges, and sought to cultivate participant ownership of research results.
3. **Intentionally Cultivate Diversity, Equity, Inclusion, and Justice (DEIJ):** We worked closely with grantees and the MACP team to construct a diverse sample of research participants to ensure representation of practitioners working in countries across the MACP portfolio at the global, national, and community levels. Data collection instruments were developed in a variety of languages, designed to elevate grantees' and local partners' knowledge and insights, and carefully applied to encourage inclusion and mutual respect throughout the research process. We also worked to minimize the participant burden while developing and sharing evidence and lessons that participants can apply in their own contexts to maximize results and sustainability.

What contextual factors foster community disaster readiness?

1. **What context elements in comples systems are most likely to enable or disable community disaster readiness?**
2. **What context descriptors show important trends in enabling/disabling preparedness?**
3. **How can MACP programming influence contexts in pursuit of sustainble results?**

Exhibit 2: Research Questions

Report Structure

The next section presents the Research Design, followed by a detailed explanation of the methods the research team applied to collect and analyze data. Subsequent sections explore the promises and pitfalls of context analysis, and present the findings and conclusions from this study. The final section offers recommendations for MACP and others interested in bolstering disaster readiness across the world.

1. For more on the EEF, please visit: https://www.equitableeval.org/framework.

Research Design

Analytical Framework

No MACP-funded project or system (or subsystem) functions in isolation. Every context is different, but useful commonalities can be found embedded in systems. This exploratory research is grounded in systems thinking and complexity theory, organized around three main overlapping systems: Ecological, Industrial, and Human.

This study was not designed to test a hypothesis. The aim was to inventory a wide set of elements that any given context may feature, prioritize these elements by their influence (positive, negative, neutral) on community-level preparedness, and examine how they interact to promote sustainable change. MACP-funded preparedness projects are introduced by a grantee into a complex setting. The Ecological, Industrial, and Human Systems in which a targeted community is embedded inevitably influence each project. In turn, the grantee-led project (itself a sub-system) influences the three systems and the elements of each. **Exhibit 3** offers examples of the context elements that make up each system.

Exhibit 3: Elements of Complex Systems—Detail

Ecological System & Hazards

Multi-risk contexts, environment & natural resources, natural hazards, (intensity,frequency, & extensiveness), geological hazards, biological hazards, technological hazards, conflict

Industrial System

Energy, economic, communication & information, market access, infrastructure

Human System

Government: (political dynamics, legislation, national/local disaster risk governance, application of laws)

Community: (awareness & learning, social systems, cultural dynamics, DEIJ)

Individual: (health & disability, age, income, gender, education level)

Assumptions & Caveats

A few important assumptions are embedded in the design of this research:

- **Context is infinite.** This research necessarily focused on narrowly defined context elements.
- **Data compiled are valid and sufficient.** MACP preparedness indicator data are valid indications of the success of the Disaster-Ready Community (DRC) Model (community cases discussed as the basis of each interview were stratified by preparedness progress). The identified documents are a sufficiently relevant set.
- **The voices of authors, respondents, and grantee informants** are those most aware of the local contexts they describe, and the influence of these contexts. Analyst bias is minimized by focusing on respondents' choice of words.

A community's disaster and evacuation map in the Philippines

Key Terms and Definitions

To ensure consistent and universal use of concepts, the study employs a standardized set of definitions for key terms **(Exhibit 4)**.

Exhibit 4: Key Terms

TERM	DEFINITION
Context	Circumstances that form the setting of a community that may influence its progress or success in achieving disaster preparedness. The context may be internal to the community (part of its culture) or external (i.e., elements that serve or hinder it from the outside).
Context elements	The components of a system outside the system's main features.
Complex systems	Systems whose behavior is intrinsically difficult to model due to dependencies, competition, relationships, and/or other feedback loops. Three main systems are explored: Ecological, Industrial, and Human (the MACP "system" is overlaid on these; see Exhibit 3).
Dynamics and nature of influence	Interlinkages within and between contextual elements and preparedness. Dynamics can be: • Enabling—links that foster positive change to preparedness • Disabling—links that introduce challenges to preparedness • Neutral—links that are present but not visibly connected to any change in preparedness.
Strength	The force of an influence on preparedness: strong or light/moderate.

Methodology

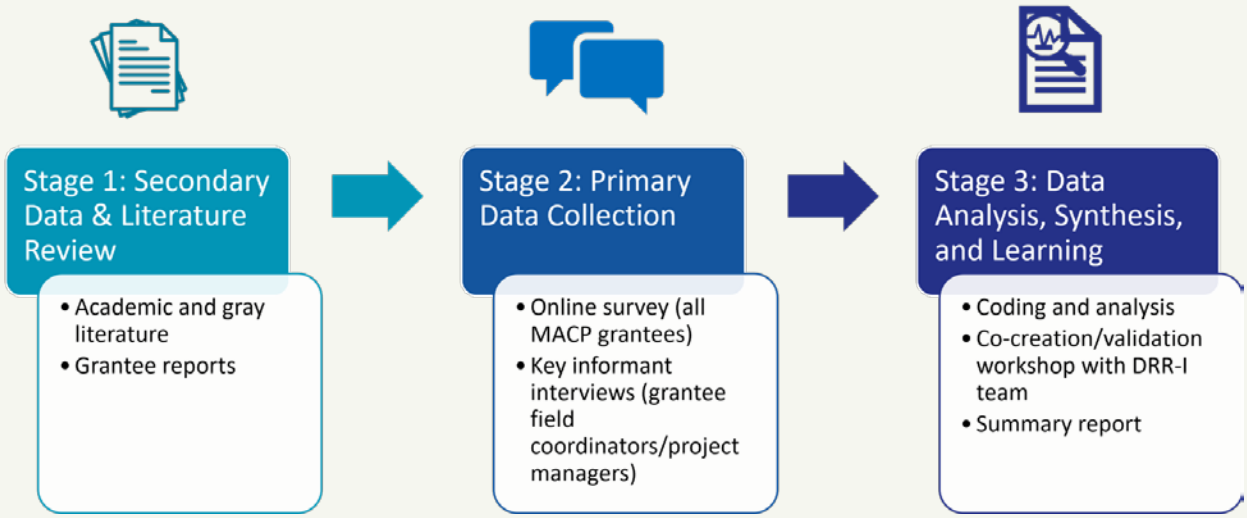
The study involved three overarching stages: (1) a foundational secondary data and literature review; (2) primary data collection (online survey and remote key informant interviews [KIIs] only); and (3) analysis, synthesis, reporting, and learning **(Exhibit 5)**.

Stage 1: Secondary Data & Literature Review

A review of what is already understood across scholarly and gray literature[2] was an important foundation for the study. The research team used a systematic literature review to map and examine the context elements described in the literature. This stage also helped to inform more specific and refined tools for Stage 2. The secondary literature review (SLR) covered two channels: (1) academic and gray literature (a total of 309 documents related to community preparedness, recruited from Scopus, Relief Web, and United States Agency for International Development (USAID) Development Clearing House), and (2) documents related to MACP-funded projects (75 MACP grantee reports).

We examined the presence of context elements inside retained documents across both channels, and systematically coded the nature (positive, negative, or neutral for community readiness) and strength (strong or moderate/light) of each element in MaxQDA, using dictionaries for each systems element. After a preliminary analysis and completion of the SLR, we refined the data collection instruments and sampling plan for Stage 2.

Exhibit 5: Methodology Overview



2. The term "Gray literature" refers to research and information that is produced outside of traditional commercial or academic publishing channels and is typically not distributed through standard publishing frameworks. This type of literature includes a wide range of documents, such as reports, white papers, policy briefs, conference proceedings, technical documents, and government publications. Gray literature is often created by organizations like government agencies, research institutes, non-governmental organizations (NGOs), think tanks, and corporations.

Stage 2: Primary Data Collection

Methods

In Stage 2, we collected primary data using **two methods:** (1) a rapid online survey and (2) KIIs.

The rapid online **survey** questions sought to capture a wide range (per grantee and country) of perceptions regarding the importance of specific contextual elements influencing communities and projects, particularly those surfacing as key in Stage 1, and included both open- and closed-ended questions. To recruit respondents, a survey link and suggested language was sent to contacts at each prime grantee. The contacts were instructed to share the survey link with individuals within their own organization and those at their local partners that support MACP-funded preparedness work. The aim was to get responses from all MACP grantees and countries. The survey asked about perceptions and experience rather than hard facts. The instrument was designed in English and translated into Spanish, Bengali, Nepali, Bahasa Indonesia, and Tetum, based on the languages that were required in the KIIs, and the survey was conducted using KoboToolboClosed-ended questions asked which complex systems, contextual elements, and combinations of elements were most influential in the geography with which respondents were most familiar, while open-ended questions allowed respondents to provide additional context for closed-ended responses.

The **interviews** validated the resulting contextual influences from Stage 1 and interrogated the links between them. To recruit informants, we reviewed indicator data reported by grantees to identify two sets of communities: (1) those that are progressing quickly toward becoming disaster ready, and (2) those that are progressing slowly. Each KII was conducted with a group of respondents who were closest to each of the communities in the two groups identified.

Interviews were modeled on the following questions:

In your MACP project communities (name them from the stratified set),

- *How would you describe the context of Group 1 communities? Is there anything about their contexts that is similar across the group? Distinctly different? What about Group 2?*
- *How has each contextual element influenced or affected progress in the disaster preparedness of [Group 1/2 communities]?*
- *Thinking about your MACP-funded project in [Community Group 1/2], how would you say your project aimed to maximize the influence of [recap enabling elements]?*
- *Of the elements you mentioned, which are most important for sustaining preparedness in the Group 1/2 communities?*

Sampling

Informants and respondents: Community preparedness indicator data were examined (2021 to 2024), and a set of two community groups was selected, classified by level of "achievement": one group with frequent "high" or improving scores across the ten indicators and the second with lower, or worsening, scores. Grantee staff who were most familiar with the pre-identified community sets were recruited for the interviews. Grantee leaders in each targeted country were asked to identify and provide contact information for their staff. All grantee leaders and staff directly involved in the management of a given community effort (no matter the level of their role) were invited to respond to the survey.[3]

The online survey received 144 responses across seven countries, including 46 from local partners of MACP grantees. A total of 11 key informant interviews were conducted with 60 informants. See **Exhibit 6** and **Exhibit 7** for more information.

Stage 3: Data Analysis, Synthesis, and Learning

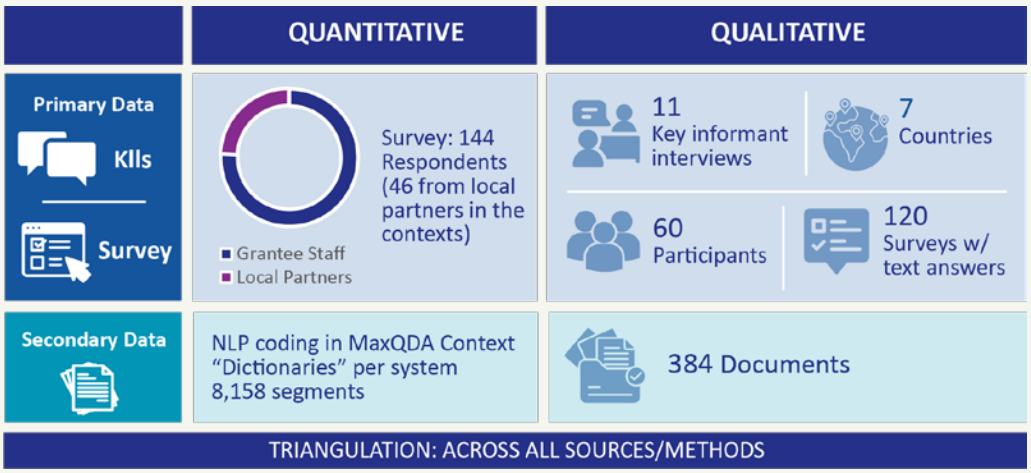
Analysis

All interviews were recorded with consent, transcribed, translated into English, and transferred electronically for coding in MaxQDA. The coding in this stage was identical to Stage 1. All clean segments[4] referring to specific contexts were scored to assess the influence and nature of each context.

Synthesis and Learning

The preliminary results served as the basis for a co-creation and validation workshop with the MACP team (July 2024), in which MACP had the opportunity to engage with cleaned and triangulated emerging findings (the 'WHAT') and to begin co-creating meaningful conclusions (the 'SO WHAT'). This session aimed to ensure that the results of the Deep Dive inform the MACP team's learning priorities, and that

Exhibit 6: Data Sources



3. The EnCompass Institutional Review Board (IRB), which reviews research studies to ensure ethical standards are upheld and vulnerable populations are protected in research, reviewed the study design and determined that due to the grantee partner/donor relationship and the low level of risk to study participants there was no need to conduct full review.

4. "Clean," in this context, refers to a segment that described a context and that the text had enough detail to score it. Cleaning also involved reducing or expanding segment size to the full and unique context.

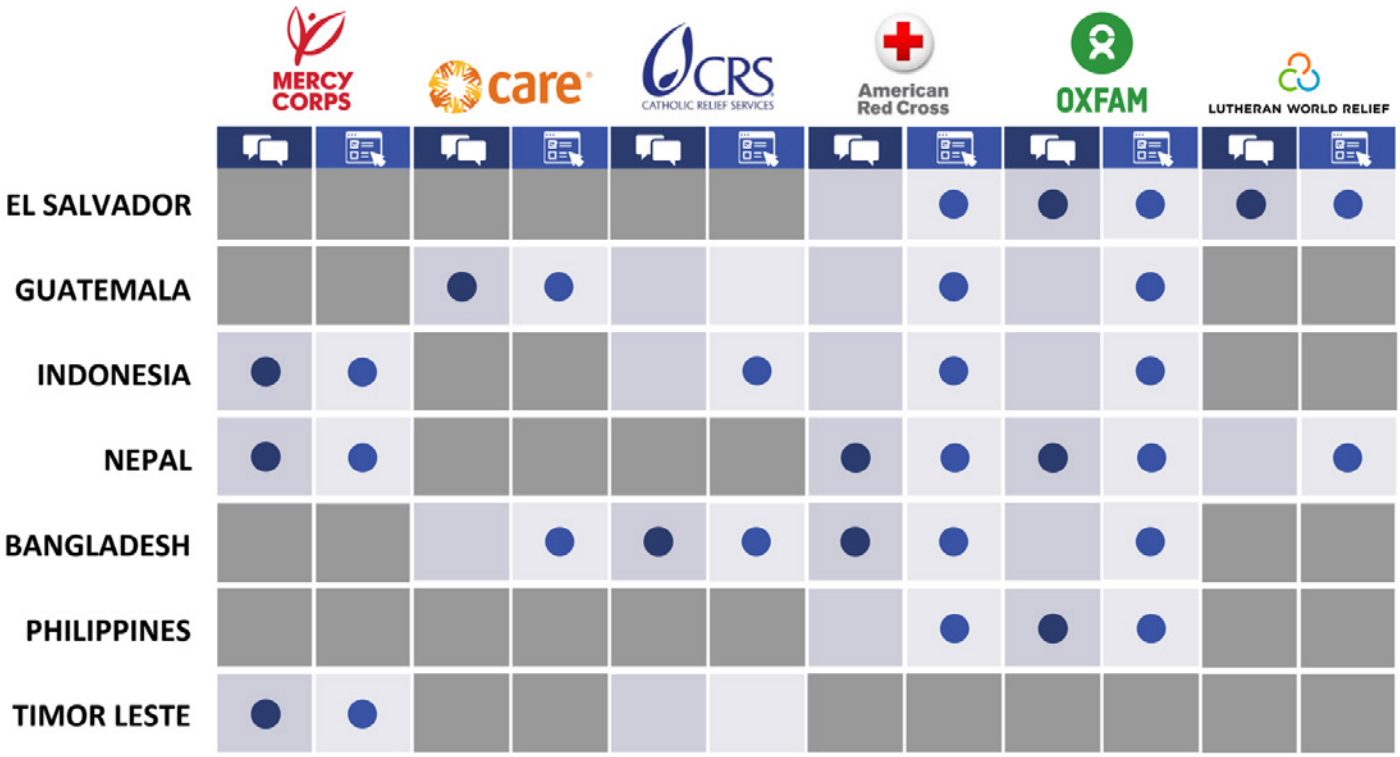


Exhibit 7: Informants by Method

they enjoy a clear, collective line of sight regarding the implications of the study, including next steps. We were encouraged to think beyond MACP and propose actionable recommendations (the 'NOW WHAT') in this report, to support the wider disaster preparedness community of practice.

Research Limitations

Though the EL Partner team is confident that the methodology presented above is well calibrated to produce robust findings and conclusions that speak to the guiding questions at the heart of this inquiry, readers should be aware of several limitations.

First, regarding the survey deployed in stage 2: the EL Partner provided criteria and guidance to MACP grantees about the staff and partners that should be invited to respond to the survey. Grantees then distributed the survey to their networks. While this approach leveraged grantees' superior knowledge of local contexts, and likely encouraged a higher response rate due to their personal relationships with respondents, it also means that we do not have a full list of all those to whom the survey was sent. Consequently, we cannot calculate a response rate for the survey – though we did receive responses from grantee staff and local partners in every country in which they work on MACP-funded projects, with the exception of CRS in Guatemala.

Second, regarding the group key informant interviews: enumerators intentionally invited all participants to speak throughout the interviews, and in particular, focused on eliciting the opinions and insights of community-level stakeholders. That said, the fact that, in some cases, regional representatives, country representatives, and community-level workers were on the same call may have resulted in some participants being more reticent to speak than others, which would then affect the collected data.

Setting the scene: The science behind Context Analysis

The success of any Disaster Risk Reduction or Preparedness effort depends on the specific context within which it plays out. However, in the literature the **analysis of contexts** is neither deep nor broad. Academic publications define context as the set of circumstances or facts that surround a particular action or intervention. Some scholars add that context is "a complex and dynamic construct existing within complex multilayered systems with elements interacting not only with each other, but also with a broader environment, usually in nonlinear ways." Anchored in public health/DRR, Dückers[5] describes context as the "interplay between [risk] exposure, history, and culture" (see page 13).

Context analysis scholars accept that time (year and history) and place (country/geography) are non-negotiable elements of a context. Most also agree that the influence of contextual elements on an intervention can be disabling, enabling, or neutral. Some scholars refer to context analysis as " situational awareness," which emphasizes the need for analysts to cultivate this reflex in their daily work, beyond context analysis as an academic domain. In fact, one of the American Evaluation Association's five key competencies for evaluators highlights context (Domain 3, which "focuses on understanding the unique circumstances, multiple perspectives, and changing settings of evaluations and their users/stakeholders"[6]).

There is no clear consensus on whether an actor can control or control for contexts. Some scholars suggest that "context works to aid explanation, rather than acting as something to be controlled for."[5] While most humanitarian action and DRR efforts aim, to some extent, to control for contexts (i.e., take them into account and use the effort to compensate or improve them) and/or influence some contexts directly, there is always a limit to what can be done.

In 2019, the Centre for Evaluation Research produced a Framework for Situation Awareness in Program Evaluation.[7] It provides "a list of 70 'information requirements' that define what evaluators could (and should) pay attention to if they want to understand—and respond to—their contexts." The requirements address seven components: the program evaluated, the organization delivering it, the broader system/structures, the evaluation itself, the evaluation team, relationships embedded in the evaluation, and political elements influencing the evaluation.

"Context includes risk and protective factors at different levels. The context might vary along the timeline of a particular event, but it remains a product of a locally unique interplay between exposure, history and culture. On the one hand, capturing this context is a prerequisite to understand what constitutes a high-quality post-disaster response. On the other, it is a key component for a viable scale-up of promising interventions."
— Dückers (2021)

5. M. Dückers, "Capturing Intervention in Its Context: The Next Frontier in Disaster Response Evaluation and Scale-Up Planning," Intervention 19, no.1 (2021): 4–14. https://doi.org/10.4103/INTV.INTV_49_20

6. "AEA Evaluator Competencies," American Evaluation Association, n.d.

7. "Context, Context, Context . . .," Center for Research Evaluation (CERE), April 19, 2019.gram itself (Coldwell, 2019).

Dückers (2021)

"Context includes risk and protective factors at different levels. The context might vary along the time-line of a particular event, but it remains a product of a locally unique interplay between exposure, history and culture. On the one hand, capturing this context is a prerequisite to understand what constitutes a high-quality post-disaster response. On the other, it is a key component for a viable scale-up of promising interventions."

1

The set of circumstances or facts that surround a particular action or intervention

2

"A complex and dynamic construct existing within complex multilayered systems with elements interacting not only with each other, but also with a broader environment, usually in nonlinear ways." (Minary et al., 2018)

3

"As one of five competencies for evaluators: understanding the unique circumstances, multiple perspectives, and changing settings of evaluations and their users/stakeholders." (American Evaluation Association, 2018)

4

Context analysis= "situational awareness", and we need to cultivate this reflex in our work

Exhibit 8: Context Frameworks

Researchers offer varied approaches to the topic. Coldwell's exploration of the role of context in evaluation presented six features of contexts[8]: dynamic, agentic,[9] relational, historically located, immanent, and complex. Rather than describing the elements that make up a context, this schematic encourages analysts to carefully consider the nature of those elements in any context analysis. Vanderkruik and McPherson[10] proposed four main context groups (external, organization, initiative, and site/local team) and 11 contextual elements across them. Pawson[11] proposed the Four I's framework which identifies: individuals, interpersonal relations, institutional settings, and infrastructure (the cultural, economic, and social aspects of the context).

While these frameworks (and many more not cited) are more comprehensive, **the present context analysis is restricted to elements that are external to the MACP preparedness programs. This could be either surrounding or inside the communities MACP grantees serve.** While we recognize their influence, **we do not examine dynamics inside MACP and its grantees here** (i.e., the grantees' implementation skills and capacity) nor any internal considerations that influence MACP funding decisions and its selection of grantees and countries. **MACP is nonetheless guided by documents reflecting donor intent, corresponding with emphasis on certain aspects of the sector, such as low attention and natural hazards**. The analysis also does not examine the influence of the study itself, relationships within the study team, or the relationships between MACP and the EL Partner tasked to lead this research.

The study uses the three broad categories described above (Ecological, Industrial, and Human; or planet, products, and people) to classify elements of complex systems. The science of context analysis and the elements proposed to structure or characterize such an analysis guided the determination of the number and nature of elements that belong to each system. The list of contextual elements also aligns to the components of disaster risk (hazards, exposure, and vulnerability/capacity).

Coldwell's six features of contexts also informed this analysis, especially the approach to complexity, how the contextual elements change (dynamic), how an element may influence preparedness directly—without the MACP-funded project (agentic)—and how elements are linked or related to each other (relational). A total of 26 context elements were searched, coded, and scored.

8. M. Coldwell, "Reconsidering Context: Six Underlying Features of Context to Improve Learning from Evaluation," Evaluation 25, no. 1 (2019): 99–117. https://doi.org/10.1177/1356389018803234

9. Agentic is used to denote that actors and groups of actors can work to create changes independently from the program at the same time as influencing the program itself (Coldwell, 2019).

10 R. Vanderkruik and M. E. McPherson, "A Contextual Factors Framework to Inform Implementation and Evaluation of Public Health Initiatives," American Journal of Evaluation 38, no.3 (2017): 348–359. https://doi-org.ezproxy4.library.arizona.edu/10.1177/1098214016670029

11. R. Pawson, The Science of Evaluation: A Realist Manifesto (London: SAGE, 2013).

Findings

Findings are presented by the research questions to which they most correspond.

Question 1. What context elements in complex systems are most likely to enable community disaster readiness?

1. Overall, context elements in the Human System influence community preparedness the most.

The first examination of contexts was at the system level, aiming to understand the influence of each system: Ecological, Human, and Industrial. Here, we did not assess the nature of the influence (whether elements are enabling or disabling) but simply the salience—how frequently a system was noted explicitly in the evidence.

The most prominent system to influence community preparedness is the Human System **(see Exhibit 9)**. The Human System includes, for example, elements such as social systems, awareness and learning, and governance, which are described below.

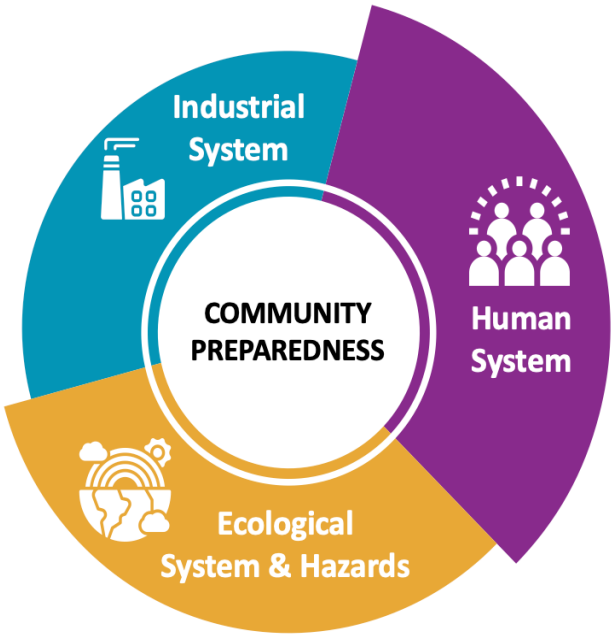


Exhibit 9: The Human System dominates the contexts

This appears to indicate that trying to physically control the environment (i.e., curbing or mitigating hazard behavior in the Ecological System) may reap less benefit than a primary focus on human interactions. Also, instead of investing in technological solutions for preparedness (i.e., through products inside the Industrial System), a strong and steady focus on human-driven solutions may be a more fruitful way to favorably influence preparedness outcomes.

It is important to recognize that all the data sources used for this research sit within the Human System: humans wrote the documents, humans completed the survey, and humans were interviewed. Clearly, the research did not set out to canvass the direct opinion of elements in the planet or of the products. While it is unavoidable, it is important to remember this framing.

2. Disaster risk governance, the prominence of hazards in community experience, and communication and information have the strongest influence on preparedness.

In a subsequent step, we triangulated across the three data sources (SLR/literature, KIIs, and survey) to identify the ten most influential contextual elements in each system. The triangulation (Exhibit 10) was critical to identifying elements that converge, i.e., were highlighted in more than one source, and those that diverge, i.e., appeared frequently in only one source. Here again, the focus is on influence. **Exhibit 10**, therefore, does not distinguish between enabling and disabling, and lists the elements in order of prominence in the evidence.

Reading across the three lists, disaster risk governance (DRG) at various levels (national and local) surfaces systematically in each data source (in first place for both the SLR and KII, in second and ninth places for the survey, and in eighth place for the KII). DRG is a critical element to consider in community disaster preparedness regardless of the level. The secondary data/literature showed a stronger focus on **national-level DRG**, and the primary data (KII and survey) gave more prominence to **local-level DRG** (even where national-level DRG reappears, lower in the top ten lists). Local-level DRG varies across contexts; it may include community-led or decentralized and municipal government leadership closest to the communities.

A second trend shown in Exhibit 10 is the various dynamics related to hazards and risk. Each data source reveals a slightly different perspective on hazards. The survey highlights multi-risk, interviews underscore natural hazard frequency, and lower in the ranking, the literature stresses biological hazards (e.g., COVID-19) and natural hazard extensiveness. While the presence of hazards, in general, is understood as a critical criterion used to target specific communities for disaster preparedness efforts, the prominence of those same hazards in the shared community psyche or spirit— multiple hazard extremes heightened by climate, the frequency of floods, or the widespread nature of drought—is a key factor that strongly influences community preparedness. Communities that do not suffer multiple, repeated, or extensive hazards appear to be less preoccupied by them.

Exhibit 10: Triangulation of contextual element salience

RANK	SLR	KII	SURVEY
1	Gov/National DRG^	Gov/Local DRG^	Multi-risk*
2	Communication & Info^	Ind/Income*	Gov/Local DRG^
3	Com/DEIJ^	Nat Haz Frequency*	Com/Aware & Learning^
4	Economy^	Infrastructure^	Env/Nat-resource*
5	Infrastructure^	Com/Social Systems*	Communication & Info^
6	Ind/Gender*	Com/Culture*	Economy^
7	Ind/Health & Disability*	Communication & Info^	Markets*
8	Ind/Age*	Gov/Nat DRG^	Infrastructure^
9	Bio Haz (Fix)*	Nat Haz Intensity*	Gov/National DRG^
10	Nat Haz Extensiveness*	Com/Aware & Learning^	Com/DEIJ^

Key: ^emerging trend, surfacing in > 1 source, *divergence (one source only)

Ecological System & Hazards | Industrial System | Human System

A third commonality in Exhibit 10 surfaces from the Industrial System (see blue cells). Communication and information and infrastructure are systematically found among the top ten elements in all three sources. Examples of communication enabling preparedness abound (see below).

In Australia, swift collection and dissemination of local information . . . enables increased connectedness with communities and authorities and facilitates understanding local risk.[12]

Communities in Uganda that perceive themselves to be at risk [via information/communication] are more likely to prepare and mitigate future hazardous events.[13]

Significant improvements in hazard monitoring, interpretation of data, and the development of an EWS (Early Warning System) leads to preparedness in Trinidad & Tobago.[14]

In Bangladesh, EWS are seen to saves lives: "Now, even fishermen can follow the weather update before going fishing."[15]

In Indonesia, communication and technology "ensured that the warning could be received by everyone affected . . ., understood and useful, preparing and saving lives."[16]

Functional mobile phone networks in Ethiopia "make people more prepared . . . and increased preparedness for C19."[17]

12. Haworth B.; Bruce E.; Middleton P. Emerging technologies for risk reduction: Assessing the potential use of social media and VGI for increasing community engagement. Australian Journal of Emergency Management 33(3). 2015.
13. Nakileza, B.R., Majaliwa, M.J., Wandera, A. & Nantumbwe, C.M., 2017, 'Enhancing resilience to landslide disaster risks through rehabilitation of slide scars by local communities in Mt Elgon, Uganda', Jàmbá: Journal of Disaster Risk Studies 9(1), a390. https://doi.org/10.4102/jamba.v9i1.390.
14. USAID and Miyamoto International. PREPARE Trinidad and Tobago Semi-Annual Performance Report. Reporting Period: October 1, 2020 – March 31, 2021.
15. Zaman T, Tahsin KT, Rousseau Rozario S, Kamal AB, Khan MR, Huq S and Bodrud-Doza M (2022) An overview of disaster risk reduction and anticipatory action in Bangladesh. Front. Clim. 4:944736. doi: 10.3389/fclim.2022.944736 (2022_Zaman_Bangladesh, p. 1).
16. For example in: The effectiveness of community-based early warning system of Kelud volcano eruption 2014 Eko Teguh Paripurno1,* , and Arif Rianto Budi Nugroho. MATEC Web of Conferences 229, 03015 (2018) https://doi.org/10.1051/matecconf/201822903015 . ICDM 2018.
17. Social work responses and household-level determinants of coronavirus preparedness in rural Ethiopia Yonnas Addis, Dubale Abate , João Batista.2020. DOI: https://doi.org/10.21203/rs.3.rs-56122/v1.

Elements that appeared in two sources include: Community-level DEIJ (third place in the SLR and tenth place in the survey), Community awareness and learning (third place in the survey and tenth place in the KII), and the Economy (fourth place in the SLR and sixth place in the survey).

Many elements appear on only one list. Individual income ranked second in the KII; the environment and natural resources ranked fourth in the survey; social systems and culture ranked fifth and sixth, respectively, in the KII; gender, health & disability, and age ranked sixth, seventh, and eighth in the SLR; and markets ranked sixth on the survey. Explanations for these unique elements are at least somewhat related to the nature of each source. For example, literature lends itself to a wide set of elements because it is not bound by time required for an interview. Interviews allow probing and live follow up on specific elements. The survey limited the number of elements in each system that respondents could rank as most influential.

3. Awareness and learning surfaces as the most enabling context element; natural resources are the most disabling.

Diving into the nature of the most prominent context elements, **Exhibit 11** portrays disabling and enabling elements across all systems. The elements shown are those that authors of documents, informants in interviews, or survey respondents described as the most enabling or disabling in relation to community preparedness. It is important to note the presence of all three systems in both the enabling and disabling categories. However, an element cannot be considered both "most enabling" and "most disabling"; each element can only be categorized as one or the other.

Among the elements that enable preparedness, while less prominent in the overall analysis, Community awareness & learning (in the Human System) surfaced strongly as an enabler of preparedness in all three sources. This is not a statement of the community's desire to become more aware or to learn but rather the investment in building the awareness or producing learning. In fact, it is the only enabler that surfaced clearly from all three (see page 18 for examples).

Exhibit 11: Nature of Contextual Elements Across All Systems

DISABLING	ENABLING
1. Env/Nat-resource	1. Com/Awareness & Learning
2. Gov/Pol Dynamics	2. Multi-risk
3. Ind/Income	3. Com/Social Systems
4. Com/Culture	4. Gov/Local DRG
5. Markets	5. Gov/Application of Law
6. Nat Haz Int/Ex	6. Commuication & Info
7. Infrastructure	7. Gov/Legislation
8. Com/DEIJ	8. **Prior/Other External Support

As examples: in Colombia, "drills and [simulations] contribute to improving response capacity and coordination between different institutions" (USAID, 2023.[18])

In the United States, "mailing notices to property owners in the Central Valley who are at risk of flooding" is an annual reminder that helps households stay aware and prepare (Pawley, 2023.[19])

During the COVID-19 pandemic, a social media information campaign run entirely by volunteers, "actively informed people of the messages and engaged in debates on social networks" to prepare as many people as possible (Red Cross, 2021[20])

One element in the Human System that was captured from the interviews was not even presented as part of the analytical framework (Enabling element 8 in Exhibit 11). This was the presence of other nongovernmental actors having contributed to community preparedness prior to a grantee's MACP-funded efforts staged there. The efforts of different preparedness actors in the same community surfaced as an enabler, suggesting that repetition may produce positive reinforcement.

While the element Environment and Natural Resources ranked fourth in the earlier analysis given its overall influence, it surfaced as the single strongest disabler of preparedness. The lack of access to ecosystem services surfaces as a huge detriment to community preparedness. Natural resources that are endangered by industry, encroachment and neglect, for example, results in fewer households being able to use them to protect or sustain their livelihoods. Examples from the research include sea level rise with significant impacts in Bangladesh; decreasing river health, ecosystems, and aquatic biodiversity, which badly affect communities and their livelihoods in Nepal (USAID, 2022); and degraded forest ecosystems and logging that have crucial repercussions on communities in Papua New Guinea (USAID, 2018).

Having examined the key contextual elements across all three systems together, subsequent findings dive more deeply into each system, starting with the Ecological & Hazards System.

4. The prominence of hazards is a key enabler of preparedness.

In the **Ecological & Hazards System**, numerous important nuances surface. As noted above, the prominence of multiple hazards (designated "multi-risk" in **Exhibit 12**) elevates the importance of preparedness for many communities. Here, this is reinforced as an **enabling factor**, suggesting that while one infrequent hazard may be insufficient to do so, the convergence of numerous hazards in a limited geography plays a role in making preparedness a priority for communities.

18. Zaman T, Tahsin KT, Rousseau Rozario S, Kamal AB, Khan MR, Huq S and Bodrud-Doza M (2022) An overview of disaster risk reduction and anticipatory action in Bangladesh. Front. Clim. 4:944736. doi: 10.3389/fclim.2022.944736.

19. Pawley A, Moldo D, Brown J and Freed S (2023) Reducing flood risk and improving system resiliency in Sacramento, California: overcoming obstacles and emerging solutions. Front. Water 5:1188321. doi: 10.3389/frwa.2023.1188321.

20. Red Cross EU Office (2020). Red Alert. National Red Cross Societies managing disaster risks in Europe.

DISABLING	ENABLING
1. Nat Haz Intensity	1. Multi-risk
2. Env/Nat-resource	2. Geo Haz (FIX)
	3. Nat Haz Extensiveness

Exhibit 12: Enabling and Disabling Contextual Elements in the Ecological & Hazards System

The concept of multi-risk, or the interplay of more than one hazard overlaid on exposure and/or vulnerability, is also a strong enabler overall. In Bangladesh, for example, multi-hazard assessments and shelters are seen to "play a pivotal role in building preparedness" and are supported by government authorities.[21] In India, a focus on multi-risk reportedly makes a "tangible difference in the long run" when strategic decision-makers prepare and plan to deal with "cascading catastrophes to promote resilience."[22]

The literature promoted the importance of **geological hazards** (frequency, intensity, and/or extensiveness) **as an enabling influence**. Examples include Indonesia, where a 1907 tsunami killed more than 50 percent of Simeulue's population at the time, making the story of the 'Smong people' resonate in the collective memory 100 years later, and leading to greater preparedness today across generations.[23] In response to the vivid fear of earthquake there, "a strong socialization program was instituted," which focused on hazard and risk communication to build preparedness, "between stakeholders and communities and on establishing roles for local community leaders."[24]

Natural hazard extensiveness, the widespread nature of some hazards where nearly everyone is affected (e.g., drought), also brings preparedness to the forefront. In Yemen, extensive hazards led to the loss of productive land, uprooting of fruit trees, death of animals caught in floodwaters, and destruction of infrastructure—lessening preparedness.[25] Extensive disasters are reported to cause "enormous damage worsening conditions and preparedness" in Haiti.[26] Generalized losses due to drought are reported to cause hunger leading to a lack of preparedness in Central America.[27] Multiple extensive shocks lead to reduced financial support, and large national trade deficits that contribute to high inflation and currency devaluation are driving limited access to nutritious meals, leaving communities less prepared in Ethiopia.[28]

21. Zaman T, Tahsin KT, Rousseau Rozario S, Kamal AB, Khan MR, Huq S and Bodrud-Doza M (2022) An overview of disaster risk reduction and anticipatory action in Bangladesh. Front. Clim. 4:944736. doi: 10.3389/fclim.2022.944736. 22.
22. Indrajit Pal, Subhajit Ghosh and Neshma Tuladhar. Risk Governance Perspectives for compounding hazards: a case study in Megacity Kolkata. Pandemic Risk, Response, and Resilience https://doi.org/10.1016/B978-0-323-99277-0.00005-X
23. Alfi Rahman and Khairul Munadi. Communicating Risk in Enhancing Disaster Preparedness: A Pragmatic Example of Disaster Risk Communication Approach from the Case of Smong Story. IOP Conf. Series: Earth and Environmental Science 273 (2019). IOP Publishing doi:10.1088/1755-1315/273/1/012040.
24. Supriyati Andreastuti, EkoTeguh Paripurno,, Hendra Gunawan, Agus Budianto, Devy Syahbana, John Pallister . Character of community response to volcanic crises at Sinabung and Kelud volcanoes. Journal of Volcanology and Geothermal Research 382 (2019) 298–310.
25. UNDP/Global Environment Facility (2018). Climate Change Adaptation in the Arab States Best practices and lessons learned. Case Study 18. Case study 18: Integrating Water Harvesting Technologies to Enable Rural Yemeni Populations to Adapt to Climate Induced Water Shortage.
26. Gardy Létang, Jolette Joseph and Vikerson Garnier. Haiti Livelihoods and Disaster Risk Reduction Program Evaluation of Strategic Interventions 2011-2014. Oxfam America. FIDEX (Firme d'Audit et d'Expertise Comptable).
27. Oxfam (2020). MACP Project: Strengthening Community Preparedness, Rapid Response and Recovery in Central America (2020).
28. Government of Ethiopia (2022). The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Ethiopian Voluntary National Report. September 2022.

DISABLING	ENABLING
1. Ind/Income	1. Com/Awareness & Learning
2. Gov/Pol Dynamics	3. Com/Social Systems
	4. Gov/Local DRG
	5. Gov/Legislation
	7. Gov/Application of Law

Exhibit 13: Enabling and Disabling Contextual Elements in the Human System

One element listed in **Exhibit 12**, the intensity of certain natural hazards, can entirely **disable preparedness** outcomes. For example, intense meteorological hazards that lead to devastating agriculture loss are hard to return from,[29] intense flash floods wreak havoc on community preparedness,[30] and intense floods cause displacement and massive damage to a country's economy and infrastructure.[31] Severe weather also causes unprecedented health morbidity and mortality in the Caribbean[32] and intensive hazard episodes are reported to have deep consequences in the Philippines.[33]

5. Awareness and learning enable preparedness the most. Poverty is most disabling.

In the **Human System**, community awareness and learning surfaces as an **important enabler of preparedness**, reinforced here again by all three data sources **(see Exhibit 13)**.

Another strong enabler is social systems at the community level. Examples include "bonding" social capital in the Philippines, a reciprocal exchange that is especially important to preparedness where other forms of capital are lacking[34] and mutual benefit collaboration (known as wantok), which followed a 2007 tsunami event in the Solomon Islands.[35]

At the bottom of the enabling list, it is interesting to note the weight of government. The last three enablers listed are at the government level: local disaster risk governance, government legislation, and the application of those laws are all seen as critical enablers of preparedness. While many actors deem government to be beyond the direct control of a preparedness project, preparedness likely cannot be optimal in places where these contextual elements are absent. Some examples in the research describing this positive government role include social protection systems in Indonesia, urban planning in Nepal, building codes in Tanzania, and the government's ability to enforce building codes in Guatemala.

29. Dwijen Mallick, C. Emdad Haque, Sharmind Neelormi (2023). FINAL TECHNICAL REPORT OF THE SAKTEE PROJECT. Bangladesh Centre for Advanced Studies.
30. Oxfam, Nepal (2021). Pre Crisis-Market Analysis: Rice, lentils and soap market systems. Aria.
31. Muhammad Ashraf Ansari, Muhammad Ashraf, Ghulam Murtaza , Muhammad, Zaigham Javed. Assessing Community Preparedness and Institutional Role in Reducing Vulnerability of Flood Prone Areas of Balochistan. Journal of Himalayan Earth Sciences Volume 54, No. 2, 2021 pp. 47-60.
32. Saria Hassan, Mytien Nguyen et al (2020). Management Of Chronic Noncommunicable Diseases After Natural Disasters In The Caribbean: A Scoping Review. Health Aff (Millwood). 2020 December; 39(12): 2136–2143.
33. Oxfam (2022). MACP Project Reporting "Strengthening Community Preparedness, Rapid Response and Recovery in Philippines".
34. Abner Lawangen, Jessica Kate Roberts, Interactions between disaster risk reduction and intangible culture among indigenous communities in Benguet, Philippines. International Journal of Disaster Risk Reduction 94 (2023).
35. Anais Roque, Barbara Quimby, Alexandra Brewis, and Amber Wutich. Building Social Capital in Low-Income Communities for Resilience. Kyl Center for Water Policy, Morrison Institute, Arizona State University, Phoenix, AZ, USA.

An evacuation route sign in El Marne, El Salvador
PHOTO BY CLAUDIA ZALDAÑA

An important disabler in the Human System is individual income, which surfaced in the top ten lists for both the survey and the literature. People "simply do not have the money and resources to fully prepare for emergencies that may or may not happen."[36] "Lack of access to . . . jobs and income generating activities, coupled with the often incredibly high prices . . . mean economic vulnerability and therefore reduces the ability to cope with potential hazards or shocks."[37] Households at the medium economic level in Timor Leste were more likely than those at the poor level to engage in coronavirus preparedness and response.[38] This indicates that when people and households have insufficient income to feed their families, there is insufficient room or resources in their lives to prioritize preparedness. This key finding points to the benefit of a focus on poverty alleviation as plausibly more important than even targeted preparedness efforts.

Contrary to good governance, political dynamics appears as one of the key disablers in the Human System. Examples include civil unrest during elections, and corruption or lack of political will to support slum dwellers in Bangladesh: "specific and complex relations of de facto structures of authority within slums . . . combined with the overwhelming incapacity of governments to support slum dwellers" exacerbates household vulnerability, making slum dwellers less prepared.[39] In Kenya, weak infrastructure that was already unable to "respond to large-scale crises" was further exacerbated by delays, uncertainty, and civil unrest during the political election.[40]

36. Maher, Tera and Toh, Christine (2023). "We always think it's never going to happen to us": Understanding What Motivates Communities to Engage in Emergency Preparedness. International Conference on Engineering Design, ICED23. 24-28 July 2023, Bordeaux, France, ICED.

37. CARE (2018). Final Report on End Evaluation of Building Resilience of the Urban Poor (BRUP) project Implemented by CARE Bangladesh. Supported by C&A Foundation. Study Conducted by DevResonanace Ltd.

38. Mercy Corps (2022). Report on Process, Lessons Learned, Next Steps for the Dili Flood Early Warning System in Timor Leste. 31 May 2022 (2022_Mercy Corps Timor-Leste Annex. EWS Process_Lessons Learned_Next Steps_6663, p. 1)

39. CARE (2018). Final Report on End Evaluation of Building Resilience of the Urban Poor (BRUP) project Implemented by CARE Bangladesh. Supported by C&A Foundation. Study Conducted by DevResonanace Ltd.

40. P. Pham et al., The Disasters and Emergencies Preparedness Programme Evaluation: Summative Phase Report (Cambridge, MA: Harvard Humanitarian Initiative, 2018).

DISABLING	ENABLING
1. Markets	1. Com/Info
2. Energy	2. Economies

Exhibit 14: Enabling and Disabling Contextual Elements in the Industrial System

6. Communication and information most enable preparedness, while market dynamics disable it.

The **Industrial System** contains fewer elements to examine and therefore has fewer trends **(Exhibit 14)**. The communication and information element in this system surfaces as a strong enabler of preparedness, supported by all three data sources. Having access to reliable and timely information can help people take appropriate actions; this was a strong theme suggested by interview informants. The economy—linked to revenue and employment opportunities—was most often described positively, as an enabler of preparedness. Survey respondents described how a vibrant economy can help communities bounce back better and faster from a hazard.

Market dynamics and energy access are two specific **disablers of preparedness**. Communities with poor access to markets are unable to procure items that swiftly improve their status to be prepared. Poor market dynamics also add weight to daily tasks and makes households more strongly reliant on local or on farm produce and social networks. Informants noted, "give the people a vibrant economy and functional communication systems and they will take care of their preparedness themselves."

The study team found no examples where energy contexts (fuel, power supply, etc.) enable community preparedness. On the contrary, limited access to services such as energy, cooking fuel, and sanitation in Mozambique is a main aspect of "urban deprivation," eating away at preparedness gains.[41] Energy price hikes due to the war in Ukraine are reported to hamper preparedness in many geographies (e.g., Armenia[42] and Ethiopia[43]). An inadequate power supply back-up in Nepal hinders search and rescue.[44] Rising fuel prices have "remarkable effects" on DRR activities in Tanzania.[45]

Limited resources (electricity, cellular network, infrastructure, etc.) in Indonesia make it difficult to fully develop an early warning system.[46]

41. Vanesa Castán Broto, Emily Boyd, Jonathan Ensor, Carlos Seventine, Domingos Augusto Macucule and Charlotte Allen, Participation and planning for climate change: Lessons from an experimental project in Maputo, Mozambique. University of Reading and University College London (UCL), 2015.

42. Sarah Coll-Black, Cornelius von Lenthe, Stefanie Brodmann, William Shaw, Judith Sandford, Alejandro Gonzalez, and Jamele Rigolini . Social Protection in a World of Crisis: Learning from the Response to the COVID-19 Pandemic in Eastern Europe and the South Caucasus. SOCIAL PROTECTION & JOBS No. 2304, JUNE 2023. World Bank Group.

43. Government of Ethiopia (2022). The Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030. Ethiopian Voluntary National Report. September 2022.

44. USAID (2022). Midline Evaluation of Tayar Nepal – Improved Disaster Risk Management Project, March 2022.

45. UNDRR (2022). The United Republic of Tanzania SENDAI Framework 2015-2030 Mid Term Review, Tanzania Country Report

46. Oxfam (2022). Final Report of Midline Study, ACT: Asia Community Preparedness and Transformations.

Question 2. What context descriptors show important trends in enabling preparedness?

To explore this question, we examined the evolution of context influence and nature across time (the most recent five years) and geographies (mainly regions). Given system complexity, we also anticipated that interactions between elements in a system and across systems merited examination. Because there were no clear trends through time, this section focuses on the geographical and interaction descriptors.

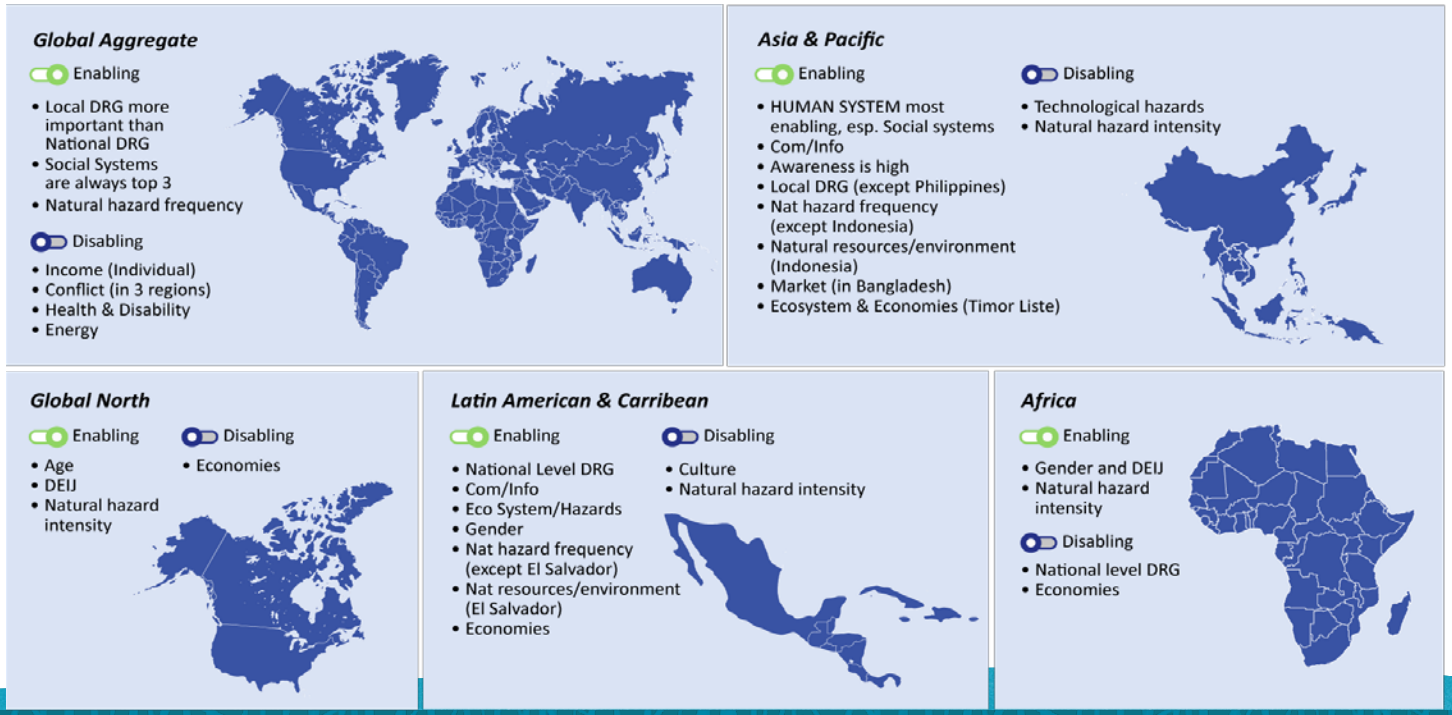
7. Contexts are hard to separate from geography and politics. A context that disables in one setting may enable in another.

Isolating geography from contexts is a huge challenge. In fact, the term "geopolitics" demonstrates the links between geographical contexts and political realities. **Exhibit 15** shows context-geography connections that emerged from this research.

There is a predominance of data points from Asia & the Pacific in this research. This likely stems from the quantity of literature that focuses on this region, and the fact that five out of the seven MACP countries in which MACP grantees are funded to work are in Asia/Pacific. Technological hazards (nuclear accidents, explosions, etc.) surface in Asia more than any other region as a disabler of community preparedness. This is likely due to the level of urbanization and population density. Like all the other regions, in Asia/Pacific, social systems are the strongest enabler.

The nature of natural hazard intensity varies across geographies. It is a strong **disabler** of preparedness in Asia/Pacific and Latin America & the Caribbean (LAC), but a strong **enabler** of preparedness in Africa (where fewer intense hazards exist, and slow-moving extensive hazards like drought dominate). In the Global North, wealthier communities rally around intense hazards (e.g., sudden onset storms) to advocate for system-wide change, so natural hazard intensity enables more than disables there, too.

Exhibit 15: Geographic distribution of contextual elements



Governance is also subject to geographic nuances. In Africa, national-level DRG surfaces as a disabler of community preparedness. Governance systems there are known to evolve very slowly with both ups and downs. In the LAC region, national-level DRG is found to be a strong enabler of preparedness, and in Asia, local-level DRG has the most positive influence on community preparedness (with notable exceptions in the Philippines).

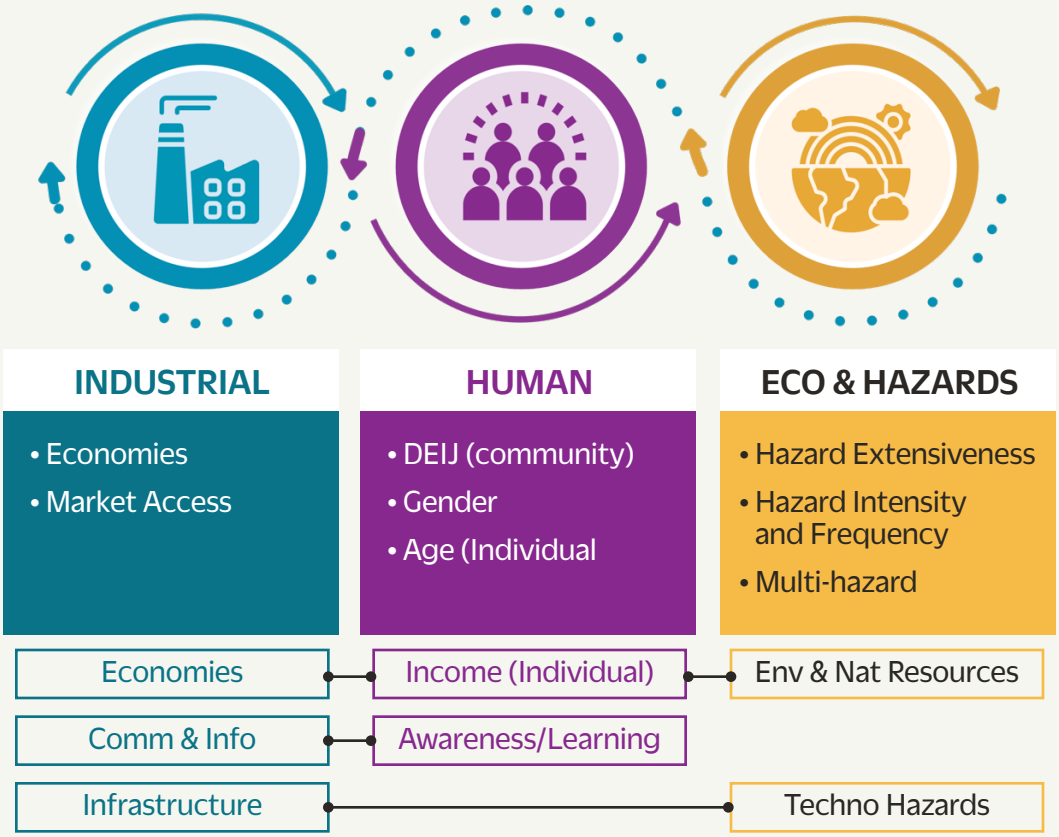
These differences offer only a glance at the vast geopolitical variance in contexts, but strongly underscore the importance of careful context analysis, and never using a cookie-cutter approach when mitigating or capitalizing on contextual elements.

8. Context elements are highly interconnected and two or more occurring together strengthen their influence.

A fundamental tenet of a systems approach is the recognition of interconnectedness. As noted above, one context element can enable in one setting and disable in another. **Exhibit 16** depicts some of the key interactions within systems and cross-system triggers

Inside each system, many elements bounce off of each other, enabling and disabling preparedness. For example, market access and economies are interrelated in the Industrial System. When markets are strengthened, revenues increase (boosting the economy). In the Human System, DEIJ at the community level is closely connected with individual-level gender and age. When disaster preparedness enables the elderly or those who are physically disabled to be protected, this also favorably influences community-level preparedness.

Exhibit 16: Interaction of contextual elements inside and between systems



The Industrial System has the most connections with the other systems. The economy (in the Industrial System) has strong implications for individual income (in the Human System). Income, in turn, is strongly driven by the environmental/natural resource base (embedded in the Ecological & Hazard System) which is also a strong predictor for the economy. Communication/information infrastructure (in the Industrial System) has the strongest links to community awareness and learning (in the Human System). Infrastructure in the Industrial System—factories, roads, railways, etc.— is closely related to technological hazards (nuclear accidents, etc.).

This analysis does not highlight trite statements of logic or fact. Rather, the covariance of evidence compiled and collected for this research has led us to identify these relationships and, in particular, assess whether and how they matter for community preparedness.

Question 3. How can MACP programming influence contexts in pursuit of sustainable results?

9. MACP grantees consistently design their projects to leverage or mitigate key aspects of context, and sometimes use adaptive management.

The enabling and disabling contextual elements that grantees aim to influence most through the design of community preparedness projects are from the Human and Ecological Systems, namely DRG, gender, DEIJ, income, and hazard prominence.

MACP grantees design projects that employ a wide variety of strategies to strengthen existing DRG arrangements in the locations where they plan to work. All grantees plan activities to strengthen communication between communities, local disaster risk management committees, and municipal government authorities, thereby creating the basic relationships that will be key for project implemen tation. Several also incorporate activities that build community leaders' skills and knowledge in accessing government resources, such as funds for disaster risk management and technical support for agricultural

PHOTO BY CLAUDIA ZALDAÑA

livelihoods. One grantee mentioned including training opportunities for government staff, to build their capacity for DRG; another mentioned creating partnerships and alliances for DRR that involve government, communities, and other international nongovernmental organizations working in the same areas. In addition, some mentioned ways that field staff adapt strategies during the project, such as tailoring their approach to work more with the parts and levels of government that are responsive and limiting their efforts with others.

Regarding strategies to mitigate the disabling elements of contexts related to gender and income, all grantees design their projects from the outset with opportunities for leadership roles for women in local disaster risk management committees. They explained that in many communities, local leadership has traditionally been dominated by men, and changing this often involves awareness-raising in communities about gender equity and encouraging women to put themselves forward for leadership positions. In parallel, most grantees also aim to improve women's economic power through livelihoods and savings initiatives, such as training and inputs for vegetable gardens and chicken rearing, and technical support for the formation of savings and loans groups (see box).

"The message we give is 'Look at me, I am a woman. I struggle hard.' This is how we present ourselves. The women look forward to coming to the meetings and we encourage them to take major positions in the committees. There are now women who are coordinators and treasurers. They are leading and learning."
— Red Cross, Nepal (KII)

"Culture assigns a role to women and when they manage to break out of that role, it is the result of a long struggle. The program design emphasised women's leadership through participation in the leadership school and in the community DRR committees (COLRED). Women were trained on their rights and the laws we have here in Guatemala. They improved their capacities in risk management and its links with gender. This leadership training really enabled them to feel stronger and take ownership of the project."
— CARE, Guatemala (KII)

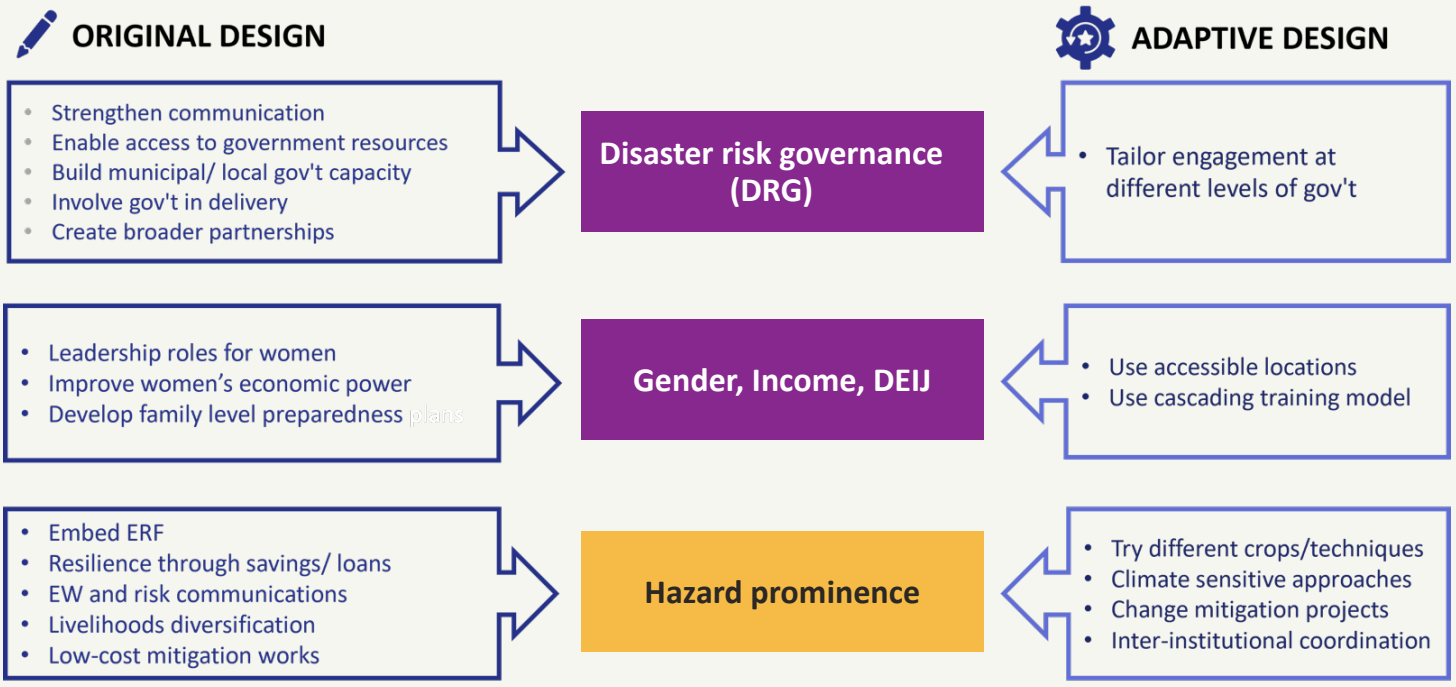
"Initially one of the barriers was that women were not going outside their homes and were not involved in any agriculture or work in front of men. But in the three and half years of our project, we worked with 661 women and developed women leaders who now organize and facilitate all meetings and manage the documents. They are working together with their neighbors as a community to prepare for disasters."
— Catholic Relief Services, Bangladesh (KII)

In addition to engaging in DRR activities that aim to benefit entire communities, two grantees mentioned strategies to address disabling elements related to DEIJ. One explained how incorporating family-level preparedness plans that account for the specific needs of different household members helped to increase overall buy-in into community preparedness objectives. Others gave examples of how they adapt during implementation to, for example, use different meeting locations that enable people with mobility challenges or who live in more remote areas to attend, and using training models that involve replication or cascading within the communities, so people who are less confident about attending public trainings can do so within their community.

MACP grantees address the prominence of hazards in the contexts in which they implement programs through several—often coexisting—design aspects. Encouraged by MACP's grantmaking practice to incorporate resources for response activities at local levels, all grants and projects include embedded

emergency response funds that grantees can draw down on to mitigate the influence of emergencies. Most grantees design projects that include strategies to improve early warning systems, train women and men to diversify their livelihoods, and carry out small hazard mitigation works. One grantee explained how staff decided to present its standard-savings group methodology (used globally) as "Savings for Resilience," to convey to community members how having savings enables them to be ready for any losses caused by hazard events.

Exhibit 17: How grantees design projects to leverage or mitigate context, and use adaptive management



Adaptive design features usually involve introducing crops and agricultural/agro-forestry techniques to cope with the local effects of changing hazard patterns, mostly associated with climate change. One grantee explained that its field staff had changed the planned mitigation projects to be more relevant to local climatic and economic conditions. Two grantees reported scaling up inter-institutional coordination on disaster risk management issues during implementation, thereby leveraging the prominence of hazards in the local context to encourage collective approaches.

10. Disaster risk governance is conducive to sustainability.

Grantees consistently mentioned DRG as the element of project contexts that is most conducive to sustainability. Specifically, the connection between local governance structures at the community level and other levels of DRG were highlighted by grantees as being, in their view, a critical factor that will contribute to sustaining community preparedness results. Referring to projects in Bangladesh, Guatemala, and Timor Leste, respectively, respondents from CRS, CARE, and Mercy Corps explained how the relationships between trained community committees and government service providers, which are established and consolidated during project implementation, are expected to endure beyond MACP project timeframes, especially when governments have budgets—however small they may be—to allocate to disaster risk reduction. The organizations emphasized that developing exit and transition plans through collaboration between grantees, communities, disaster risk management authorities, and other disaster risk management stakeholders plays an important role in facilitating sustainability (see box).

"During the final phase of the project the Nepal Red Cross Society project team and local chapter developed a sustainability plan in consultation with the local government. The sustainability plan is a joint effort and the municipal authorities have committed to follow it... They are in the process of hiring new staff to continue the work on DRR and have allocated approximately $3,000 to distribute among six community-based Disaster Risk Reduction Committees as emergency funds. This is a great example of how a municipality is continuing the work that a MACP-supported project is doing." — Red Cross, Nepal (KII)

"We are establishing linkages between communities and government service providers, to increase sustainability. Now communities know how to get the services and they call to ask for them. Service providers now go to the communities to give them support on livestock, poultry, and other agricultural products. — CRS, Bangladesh (KII)

Grantees also shared experiences of seeking agreements and buy-in beyond the municipal level to increase the likelihood of sustained change. For example, Lutheran World Relief (LWR) developed territory-level engagement in watershed management committees in El Salvador, supported by letters of commitment from the municipalities in the watershed. It believes that this will have an enduring effect through co-responsibility and enable sustained good watershed management practices and governance. Mercy Corps provided a similar example of seeking sustainability through multilevel DRG, sharing how it used national policies and laws to advocate for government action at the municipal and local levels (see box).

"There is high-level regulation for DRR and government units already have budgets for that. But sometimes, when it comes to the local level, we still need to work hard to convince the governments to access it. We ask, "do you know if there's an allocation of budget for this regulation" and then we explain that they have to support the community. Because sometimes, at the local level, government staff are not really aware of this." — Mercy Corps, Indonesia (KII)

"We have always believed that establishing municipal agreements, such as a letter of commitment, is important to ensure that there is going to be some kind of follow-up to serve these communities. Meeting communities' disaster risk management needs is actually their obligation in the disaster risk governance system, but it is important to have a document that states that the project activities will continue through the municipal risk management unit, the environmental unit and other units." — Mercy Corps, Indonesia (KII)

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11. Income, community awareness and learning, and strong social systems foster sustainability.

In addition to DRG, grantees highlighted income, community awareness and learning, and strong social systems as fostering sustainability.

Mercy Corps found that improvements to livelihoods and increased incomes in communities in Nepal and Timor Leste have motivated community members to continue implementing what they learned through the project. Mercy Corps and CRS (in Bangladesh) learned that saving habits and systems established during the project are often sustained beyond the project timeframe, maintaining a degree of household resilience in the beneficiary communities.

The American Red Cross and Bangladesh Red Crescent Society found that educating religious leaders and children on disaster risk reduction enables key knowledge to continue being transferred within the community after the project ends.

Drawing on learning from its projects in the Philippines and El Salvador, Oxfam highlighted how stability and trust in social systems foster sustainability. In its experience, when local DRR leadership groups and other community organizations are active and have not undergone major compositional changes, and when leaders are responsive to community needs, other community members are willing to continue activities introduced by grantees with the support of those leaders. Mercy Corps shared similar experiences in Nepal related to developing strong ownership of preparedness within communities and by their leaders, and solidarity between community members. LWR in El Salvador and Mercy Corps in Nepal found that when community organizations have a small fund for disaster preparedness and/or response, this helps to sustain their commitment to the activities and strategies implemented during a project.

Conclusions

Conclusion 1: Out of sight, out of mind; the prominence of hazards in the community consciousness strongly influences preparedness.

A community that does not suffer multiple, frequently repeated, or extensive hazards is unlikely to be the best focus for targeted preparedness efforts. Due to competing priorities (usually economic), households in such a community generally do not have the latitude or resources to put preparedness first. The prominence of multiple hazards elevates the importance of preparedness for many communities. While one infrequent hazard may be insufficient to foster a focus on preparedness, the convergence and cascading hazards compounds risk and plays a huge role in making preparedness a a priority.

This is not a statement of failing memory, mental ability, or illogic. It simply points to understandable risk management models where households may, knowingly or not, choose to accept greater risk (or minimize the weight of dangers that appear obvious to others) in an effort to, e.g., feed their families.

Natural hazard extensiveness—when nearly everyone in a community is affected, even by slower onset or more gradual hazards—also brings preparedness to the forefront, making it difficult not to prioritize. But in contexts where hazards are less prominent, natural resource access is constrained, or market dynamics are debilitating, there is low potential to increase community risk awareness and learning, as well as significant challenges to producing swift outcomes in community preparedness.

Conclusion 2: If a vibrant economy and functional communication systems exist, people will prepare themselves.

Local economies are most often described in the positive, as something that enables community preparedness. Vibrant economies, replete with households and youth that can access credit and maintain a trustworthy revenue source, can help communities build up their defenses and prepare to bounce back better and faster from a hazard or disaster.

Market dynamics and energy supply, however, are systematically described as disabling community preparedness. Communities that cannot readily sell, buy, or trade their produce at fair prices also cannot protect revenue streams or save for a rainy day. Stocks of necessity goods may be weak or nonexistent. Communities with poor market dynamics are also unable to swiftly improve their status after a hazard event.

Functional communication to prepare communities relies on risk-informed knowledge, effective end-to-end climate services, truthful and reliable impact-based warnings and the capacity and capability of households to understand and react to both warnings and projections.

Reducing poverty paves the way for disaster preparedness. It creates spaces in the community architecture and social cohesion where households can rally to protect themselves and each other from imminent hazards or prepare for them. Households with adequate income to feed their families have room in their lives to prioritize preparedness. This makes poverty alleviation as important as any targeted preparedness effort and may add to the time required before preparedness as an outcome can be expected.

Conclusion 3: The weight of governance in many forms (local, national, legislation, and the application of those laws) are critical enablers of preparedness and sustaining preparedness.

DRG takes many forms and is instrumental at many levels to promote community preparedness. At the community level, civil society and community groups (existing or created) are assigned the roles of managing disaster risk for the greater community and holding governments accountable for protection. These groups are a key feature of MACP-funded preparedness projects. The communities gain from being linked to disaster risk management efforts at the local government level (decentralized or municipal). National-level governance systems, with skilled preparedness champions and a portfolio of protective legislation and resources to enforce it, are also required.

Even if building government capacity is outside an organization's remit, or when DRG is beyond the direct control of a grantee effort, in the absence of DRG contextual elements, preparedness efforts will not be optimal or sustained. This requires equitable access to and distribution of resources from national to local levels.

Conclusion 4: Understanding the complexity and specificity of each context is crucial for effectiveness and sustainability. Context should be proactively monitored and adaptively managed.

Context is powerful, and can change course, but is susceptible to external influences. Therefore, the contexts in which community-level disaster preparedness actions are (or will be) implemented merit close attention from all stakeholders. Contextual elements can both enable and disable community preparedness, and while some elements tend to do one or the other, their interaction with other elements may disrupt these tendencies. Understanding the complexity and specificity of every context, without assumptions, is critical to strategic planning and project design. Furthermore, community preparedness actions are most likely to make a sustained difference in settings that exhibit certain conditions related to combinations of elements. Such conditions vary across geographies, but often include DRG entities and mechanisms, stable social systems, adequate or improving income levels, and hazard prominence.

Preparedness actions that are tailored to the context in which they will be implemented and that target the most influential (both enabling and disabling) elements can mitigate disabling effects and leverage enabling ones, leading to preparedness gains for communities. Sustaining those gains and making them equitable requires adaptive management. By managing adaptively and using inclusive monitoring systems, preparedness champions can better identify and respond to changes in programmatic focus, organization, leadership, government engagement, income, participation, and other aspects of preparedness.

Recommendations

Five recommendations emerge from this analysis. They are listed in order of priority based on the evidence.

Recommendation 1: Promote and insist on context analysis and context monitoring in every preparedness effort.

This recommendation is for all actors: funders (including MACP) and implementers.

Given the omnipresence and complexity of contexts and their inability to manage themselves to the benefit of humankind, context analysis provides a critical grounding for all preparedness (and other) efforts. Contexts anchor every theory of change, making their monitoring and analysis imperative. Context analysis is often linked to the humanitarian "Do No Harm" principle which, while still not a widespread reflex, has long been considered a minimum for all Humanitarian-Development-Peace (HDP) nexus work to avoid having our good intentions produce more harm than benefit.

Context analysis is also linked to conflict analysis which, when rightfully included in context, carefully examines power dynamics. Contexts should be inventoried and analyzed, carefully included in theories of change (ToC), and regularly monitored to allow adaptive management to accommodate the ToC as they evolve. Without context analysis and monitoring, preparedness programs are destined to fail without any learning to promote sustainability.

Recommendation 2: Select communities for preparedness programs carefully—with attention to probability of multiple hazards, especially when resources are limited.

This recommendation is for all actors: funders (including MACP) and implementers.

Development and humanitarian action programs are always required to prioritize and target a set of communities, because resources are limited and needs are infinite. This also applies to preparedness programs. Because a preparedness program cannot be expected to have the same impact everywhere, the communities selected should include: (1) those where multiple or frequent hazards keep preparedness a priority for community members and (2) those where the chance for sustainable outcomes is reinforced by, at least, promising disaster risk governance at the community, local, municipal and/or national levels.

Many sources of information and datasets can help identify the most hazard-prone areas within a country. However, it is important to downscale any indicators found to confirm trends at the community level. One way this can be done is with a simple question: asking community members to list their top three priorities or worries. If their lists do not explicitly and widely contain the name of a hazard, preparedness may not be a convincing solution for them. The second method, the disaster risk governance criterion, is described below in Recommendation 4 (governance).

MACP might reconsider its DRC TOC and, given limited resources, target geographies that already enjoy the contextual elements that are most favorable for community preparedness.

Recommendation 3: Routinely include or promote a livelihood, income-generating effort for preparedness communities.

This recommendation is for all actors: funders (including MACP) and implementers.

Related to Recommendation 2, communities selected for preparedness programs are very likely to benefit from a livelihood, market enhancing, micro-credit, or income generating effort—one that satisfies households' competing financial priorities to allow them the "luxury" of looking forward and building preparedness capacity.

At a minimum, such poverty alleviation efforts should run parallel to targeted disaster preparedness, among the same communities and households within them. While no single grantee/actor may have the right skill sets to implement both, the preparedness and livelihood efforts can be implemented by separate entities in close collaboration to harmonize targeting. Alternatively, a program may start with the risk-informed livelihood activities and gradually add the preparedness focus. The likelihood of sustaining preparedness improvements is higher when activities to reduce income poverty and/or strengthen and protect livelihoods (in addition to fostering awareness and learning, developing social systems, and connecting with local DRG authorities) are part of preparedness project design.

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Recommendation 4: Actively recognize and promote the importance of disaster risk governance (system-wide) for sustainable preparedness outcomes.

This recommendation is for all actors: funders (including MACP) and implementers.

The influence of disaster risk governance on boosting and sustaining community-level preparedness, despite sounding contradictory to promoters of community agency, should never be underestimated. In addition to being a recommended criterion of community selection for preparedness efforts, DRG requires both creative and responsive approaches. Local and municipal government capacities to support disaster preparedness, including political will, regulatory frameworks, resources, and technical skills, should be assessed from the program design stage, and opportunities identified to leverage them. Where aspects of DRG are less favorable, such as weak technical knowledge, insufficient human resources, and poor connectivity with at-risk communities, programs should be designed to strengthen them. When organizations are not able to support these initiatives, they should look for strong partners and allies who can do so.

The ever-present challenge of rapid turnover of government staff should be mitigated through strategic thinking and planning, such as securing ongoing commitment at higher levels of government through regular coordination and MoUs, and generating interest and incentives (such as training, formal recognition and introductions to other potential donors) to sustain promising practices. It is possible that in some cases private and non-governmental donors are well placed to reinforce advocacy with governments, while implementing partners can help communities proactively engage with new government representatives and authorities

Recommendation 5: Plan to manage community preparedness projects and actions adaptively, based on inclusive monitoring systems and flexible approaches. Consider design to be not only a crucial first step but also an iterative, ongoing process.

This recommendation is for all actors: funders (including MACP) and implementers.

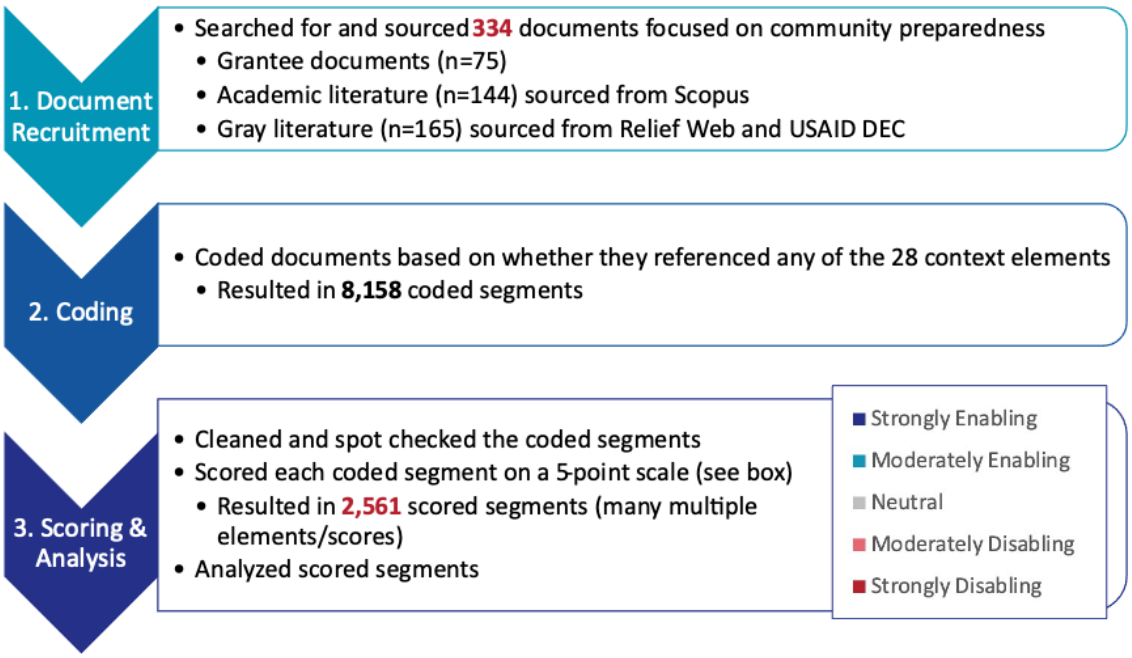
Given the dynamic nature of the complex systems in which preparedness projects are implemented, funders and implementers—along with their community partners—should be prepared (and resourced) to manage programs adaptively. This means building on the context analysis described in Recommendation 1 and leveraging ongoing context monitoring to identify emerging opportunities and threats. It also means integrating inclusive learning systems—in which a diverse array of community members and project stakeholders can participate—that enable teams and partners to make sense of emerging data and, crucially, decide how to adapt accordingly.

This iterative process of adaptive learning should be, by definition, iterative or cyclical, and is essential to setting up preparedness projects for success. For implementers, applying this recommendation means staffing teams with the skills and capacities they need to manage flexibly and inclusively. For funders, it means building in resources explicitly to promote learning and modification, and perhaps treating learning itself as an outcome worth striving for (rather than encouraging reporting of outputs and intermediate results).

Annex 1: Methodological Process

Stage 1: Secondary Data & Lit. Review

Methodology



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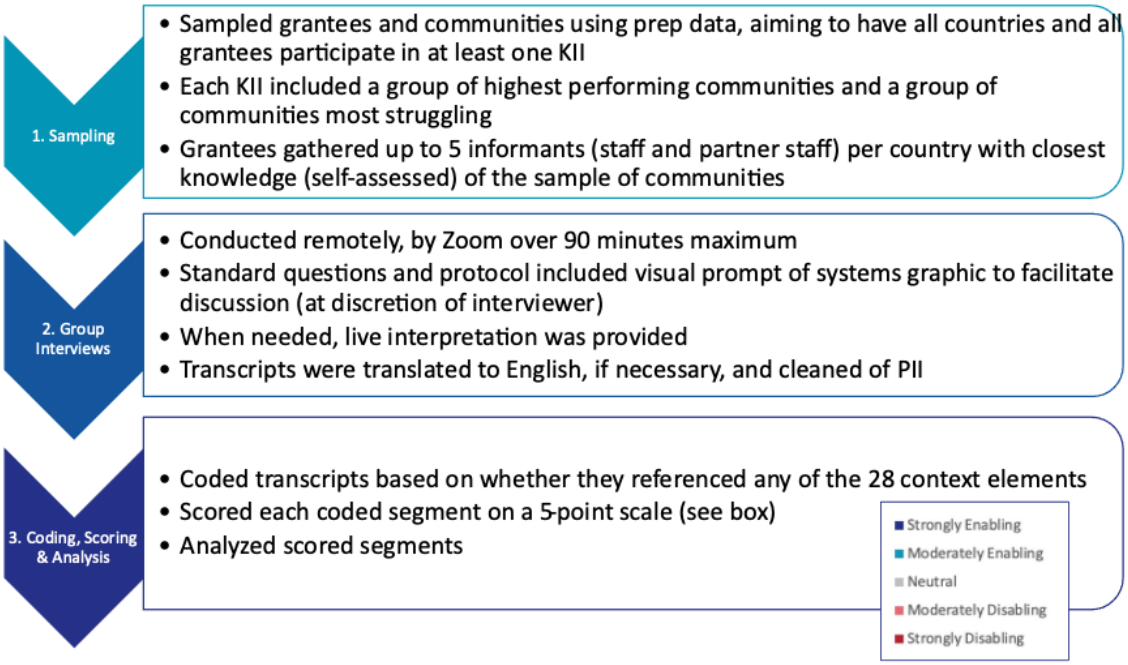
Annex 1: Methodological Process

Stage 2: Primary Data Collection, Interviews

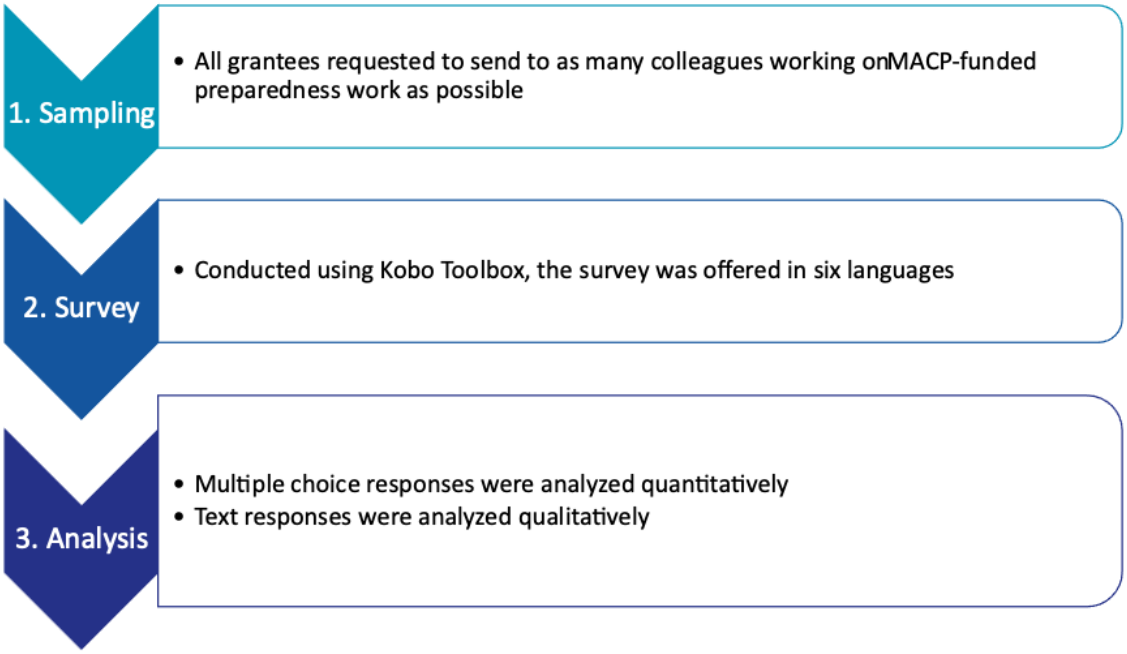
Methodology



Annex 1: Methodological Process

Stage 2: Primary Data Collection, Survey

Methodology



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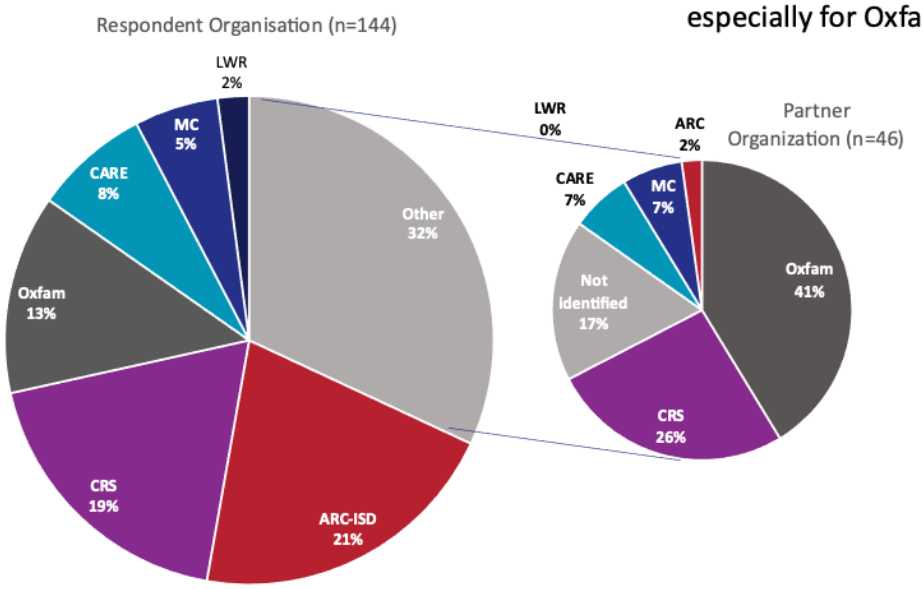
Annex 2: Survey Details

Survey Respondents by Grantee or Grantee Partner

- Wide variance between grantees
- ARC highest/LWR lowest
- Voices of partners strong (32%), especially for Oxfam



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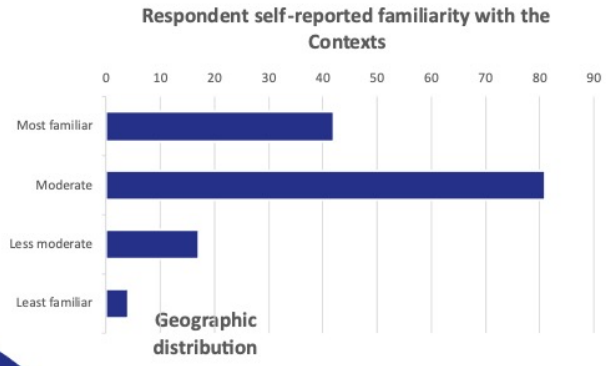
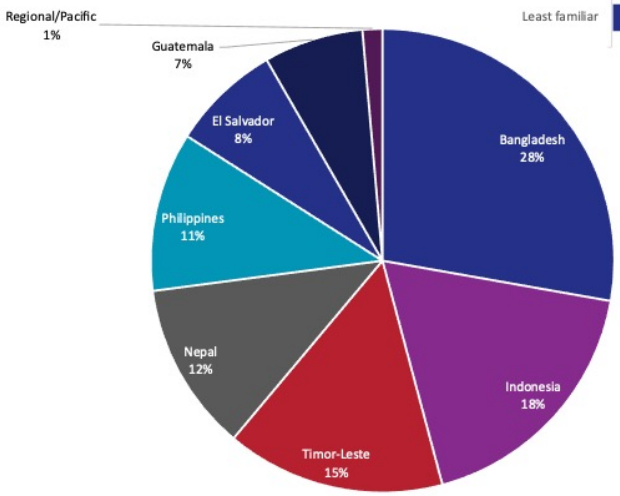
Annex 2: Survey Details

Survey Respondents by Geography & Familiarity with Contexts

- Asia/Pacific, Bangladesh most prominent
- Latin America low
- Majority at least moderately familiar with contexts





Geographic distribution

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Annex 3: Recruitment Rules and Platforms

Document recruitment was conducted using rules-based searches in two platforms only: SCOPUS and ReliefWeb, unless others were provided. The rules are featured in Exhibit 18. They were searched in all languages featured in the respective platform.

Exhibit 18: Rules for recruitment

RULES for Level 1/Recruitment: Where to search: In title, key words OR abstract (executive summary in grey literature) *but not in body*	
THEME	prepare* (preparedness/preparing/prepare) AND flood* OR drought OR storm*[47] OR wildfire OR hail OR cloudburst OR quake OR volcano OR landslide OR tsunami OR epidemic OR outbreak OR heatwave OR extreme weather OR crop failure
AND INTERVENTION	action OR project OR program* OR intervention OR effort OR operation Or response
AND Period	2015 (NB: or as early as is manageable in Level of Effort)
AND Subject Area	[Academic only] NOT: Biochemistry, Genetics and Molecular Biology, Chemical Engineering, Chemistry, Computer Science, Dentistry, Earth and Planetary Sciences, Energy, Immunology & Microbiology, Materials Science, Mathematics, Medicine, Neuroscience, Pharmacology, Physics & Astronomy, Toxicology & Pharmaceutics, Veterinary

When the above searches did not produce adequate results, a search on "community preparedness" was applied along with the hazard lists and temporal scope.

After recruitment (with results captured in MS Excel and prior to PDF downloading), a review and selection process must include all three of the following (with a positive confirmation):

- Does the abstract refer or link to a "community" the way MACP does? (e.g., an "internet community" does not qualify)
- Is the description at a general level for a given community? (e.g., not just the hospital system serving a community)
- Is it preparedness for a hazard or set of hazards? (e.g., not for a test or other)

47. Storm and all types, including cyclone, hurricane, typhoon.

Annex 4: Data Collection Tools

MACP Deep Dive Key Informant Interview Instrument

1.1 Introduction

Thank you for agreeing to participate in this interview. As we discussed via email, and as you'll have seen in the informed consent form you signed and returned prior to today's conversation, EnCompass is currently conducting research on behalf of MACP. The research intends to help MACP and grantee partners learn more about the ways in which contextual factors affect disaster preparedness at the community level.

Context, and contextual factors, are of course broad terms. For the purposes of this research, and today's interview, we define "contextual factors/elements" as "the internal and external circumstances of a community that may influence a MACP preparedness project's success". Internal circumstances could include, for example, culture and social dynamics and external circumstances could include, for instance, national-level laws and weather patterns.

Today, we would like to listen to your thoughts about how different contextual elements affect disaster preparedness in the communities in which you work. Specifically, we will ask you to reflect on and share your thoughts about two sets of communities [Group 1 includes communities whose preparedness indicator data show the strongest or fastest progress in reaching "High" and Group 2 includes those whose indicator data show signs of struggling to make progress beyond low and even to launch in some cases].

We shared with you the names of the communities in each set: paste the list in CHAT

Group 1. Progressing Swiftly	
Group 2. Slow or no progress	

Our aim is to identify differences between Group 1 and Group 2, that may be exerting influence on preparedness progress. Today's conversation should take no more than 75 minutes.

Before we begin, do you have any questions about the research we're undertaking, or the definitions of context we just discussed?

[briefly address any questions, then move into the interview]

1.2 Interview Questions

1.2.1 Question	1.2.2 Answers Group 1 (Progressing)	1.2.3 Answers Group 2 (Struggling)
a) Let's begin by thinking about the context of [Communities in Group 1]. How would you describe their contexts? Is there anything about their contexts that is similar across the group? Distinctly different? What about Group 2? a. Probe: Is there anything about their contexts that is similar across the group? Distinctly different? b. Probe: If not raised automatically, reference Exhibit 2 in the briefing note we shared ahead of time, and ask 'what about the Ecological system & hazards (external)... the industrial system (ex. markets and infrastructure)...national vs. local dynamics (in Social system)?		
b) How have each of those contextual elements influenced or affected progress in disaster preparedness of [Group 1/2 communities]? a. For each main element named in Q1, ask: Is the element's influence enabling or disabling? Is its influence strong, moderate, or light? b. What precisely about the element influenced disaster preparedness? Ask 'Why did it have that effect?' to encourage precision in the response.		
c) Thinking about your MACP-funded project in [Community Group 1/2], how would you say your project aimed to maximize the influence of [recap enabling elements]? g. Probe: Were these strategies and practices part of the original project design? An adaptation? If the latter, what caused the adaptation? h. Probe: Did you do anything to minimize the influence of disabling elements? i. Probe: Did the project duration, focus, level of interaction influence the enabling/disabling?		
d) Now we'd like to take a moment to think about sustainability. Of the elements you mentioned, which are most important for sustaining preparedness in the Group 1/2 communities? a. Probe: Why? b. Probe if any combination of elements is of particular importance with questions such as 'You have mentioned X, Y and Z; is any combination of those more helpful for sustaining results? c. Probe: Have any aspects hindered sustainability efforts?		

MACP Deep Dive Survey

1.1 Introduction

Thank you for participating in this survey. As you'll have seen in the email you received with the survey link, EnCompass is currently conducting research on behalf of MACP. The research intends to help MACP and grantee partners learn more about the ways in which contextual factors affect disaster preparedness at the community level.

Context, and contextual factors, are of course broad terms. For the purposes of this research, and today's interview, we define "contextual factors/elements" as "the internal and external circumstances of a community that may influence a MACP preparedness project's success". Internal circumstances could include, for example, culture and social dynamics and external circumstances could include, for instance, national-level laws and weather patterns.

This survey will ask you to share your views on the contextual elements that most influence community-level disaster readiness.

1.2 Respondent Information

a) Please select your organization
   a. American Red Cross / Crescent – ISD
   b. CARE
   c. Catholic Relief Services
   d. Lutheran World Relief
   e. Mercy Corps
   f. Oxfam
   g. Other

b) If you selected "Other" please provide the name of your organization, and note the MACP grantee partner with whom you collaborate:

c) Please select the country in which you are most familiar with preparedness work. You will answer the remaining questions about preparedness work in this region.
   a. Bangladesh
   b. El Salvador
   c. Guatemala
   d. Indonesia
   e. Nepal
   f. Philippines
   g. Timor-Leste
   h. Other
   i. If you selected "Other" please note the country or region in which you work the most.

d) How familiar are you with the preparedness work underway in that country?
   a. Not at all familiar
   b. Slightly familiar
   c. Somewhat familiar
   d. Moderately familiar
   e. Extremely familiar

1.3 Contextual Elements and Strengthening Community Preparedness

1) Which of the three overarching systems below would you consider to be the most important in strengthening community preparedness in the specific MACP Preparedness communities you are most familiar with?
   a. Please add any additional description or explanation to your answer here:

2) Looking at the Ecological System and Hazards, which of the elements are most important to strengthening community preparedness.
   a. Technological hazards (for example: traffic accidents, explosions, oil spills, pollution, etc.)

3) Looking at the Industrial System, which of the listed elements are most important for strengthening community preparedness? Please choose no more than TWO elements.

4) Looking at the Human System, which of the listed elements are most important for strengthening community preparedness? Please choose no more than THREE elements.
   a. Government:
   b. Community:
   c. Individual:

5) No element works in isolation. What combinations of the contextual elements above are important to your work to strengthen community preparedness?

6) What is the most important lesson you have noted about the role context plays in strengthening preparedness?

Annex 5: Preparedness Short-Term Outcome Indicators for Disaster Ready Communities

MACP DRR-I short-term outcomes	Components	Indicator	Low	Medium	High	Not yet applicable
A. Communities sustain a knowledgeable and appropriately skilled, inclusive, and self-organized group with responsibility for leading disaster preparedness	Group with responsibility, skills, and knowledge for DP/DRR	**Preparedness 1:** Number of communities with a Disaster Risk Reduction (DRR) leadership group with relevant skills and knowledge recognized by the community and, where pertinent, the relevant official body	A group with responsibility for DRR exists in the community	The group with responsibility for DRR is developing relevant skills and knowledge	An appropriately skilled and knowledgeable DRR leadership group is recognized as such by the community and relevant authorities (where appropriate)	For use when, for any reason, the project has not yet achieved the Low rubric
	Inclusive	**Preparedness 2:** Number of communities with Disaster Risk Reduction leadership group whose current membership reflects key socio-demographics of the community (in terms of gender, age, ethnicity, disability, livelihood groups, and others as pertinent to context)	DRR leadership group includes men and women	DRR leadership group includes men and women in similar proportions, and reflects some key socio-demographics of the community	DRR leadership group membership includes men and women from all pertinent socio-demographic groups in the community, in appropriate proportions	For use when, for any reason, the project has not yet achieved the Low rubric
	Self-organized	**Preparedness 3:** Number of communities whose DRR leadership group convenes, makes decisions, and implements them without outside assistance	DRR leadership group meets regularly with consistent attendance	DRR leadership group meets regularly with consistent attendance, without requiring the presence of or prompts from the partner/grantee	DRR leadership group meets regularly with consistent attendance, makes decisions, and implements them without requiring the presence of or prompts from the partner/grantee	For use when, for any reason, the project has not yet achieved the Low rubric

MACP DRR-I short-term outcomes	Components	Indicator	Low	Medium	High	Not yet applicable
B. Communities are disaster ready with inclusive plans and systems implemented and maintained/updated, incorporating learning	Plans are implemented	**Preparedness 4:** Number of communities that complete the actions in their disaster preparedness / disaster risk reduction plan, and review and update the plan regularly	Community has a disaster preparedness/ disaster risk reduction plan and has started to implement it	Community completes at least 50 percent of the actions in its disaster preparedness / disaster risk reduction plan over the last year/cycle and is currently implementing an updated plan	Community completes at least 75 percent of the actions in its disaster preparedness / disaster risk reduction plan each year/ cycle over 2 consecutive years/cycles, and updates its plan at contextually appropriate intervals (including after disasters)	For use when, for any reason, the project has not yet achieved the Low rubric
		Preparedness 5: Number of communities where at-risk households implement disaster risk reduction measures promoted by the project	26-50 percent of at-risk households in the community are implementing household-level disaster risk reduction measures the project promotes	51-75 percent of at-risk households in the community are implementing household-level disaster risk reduction measures the project promotes	Over 76 percent of at-risk households in the community are implementing household-level disaster risk reduction measures the project promotes	0-25 percent of at-risk households in the community are implementing household-level disaster risk reduction measures the project promotes
	Early warning systems are implemented	**Preparedness 6:** Number of communities in which members obtain, communicate and act upon EW information in a timely way and improve the system to reflect lessons learned	DRR leadership group meets regularly with consistent attendance	A community-driven EW system (software and hardware) exists or community is connected to an externally driven EW system	In drills/actual events, community members access and act upon EW information and implement agreed procedures	For use when, for any reason, the project has not yet achieved the Low rubric
	Inclusive	**Preparedness 7:** Number of communities where members of all socio-demographic groups feel the disaster preparedness /disaster risk reduction plans and systems meet their priority needs	All socio-demographic groups are consulted during the development of the disaster preparedness / disaster risk reduction plan and early warning (EW) system	All socio-demographic groups feel the disaster preparedness/ disaster risk reduction plan and EW system meet their priority needs	IAll socio-demographic groups feel the disaster preparedness / disaster risk reduction plan and EW system meet their priority needs, and contribute to improving them	For use when, for any reason, the project has not yet achieved the Low rubric

MACP DRR-I short-term outcomes	Components	Indicator	Low	Medium	High	Not yet applicable
C. Communities are connected with local government to access technical assistance and funding	Local government technical assistance/ funding	**Preparedness 8:** Number of communities whose risk-management plan receives support from local authorities	Community's disaster preparedness / disaster risk reduction plan is known by local authorities	Community's disaster preparedness / disaster risk reduction plan qualifies for support from the local/ regional/national authorities	Community's disaster preparedness / disaster risk reduction plan receives resources from the local/regional/ national authorities	For use when, for any reason, the project has not yet achieved the Low rubric
D. The project contributes to increasing the capacity of nearby communities and local government units for disaster readiness	Diffusion	**Preparedness 9:** Best practices, tools, and experience on DRR in this project are identified, systematized, and disseminated to local governmental and nongovernmental actors	Communities and grantee/ partner have identified promising practices	Grantee/ partner has systematized promising practices and other learning	Promising practices and other learning are disseminated to local actors	For use when, for any reason, the project has not yet achieved the Low rubric
	Uptake	**Preparedness 10:** Number of communities where members of all socio-demographic groups feel the disaster preparedness /disaster risk reduction plans and systems meet their priority needs	Yes		No/Unknown	
			Comments		Comments	

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