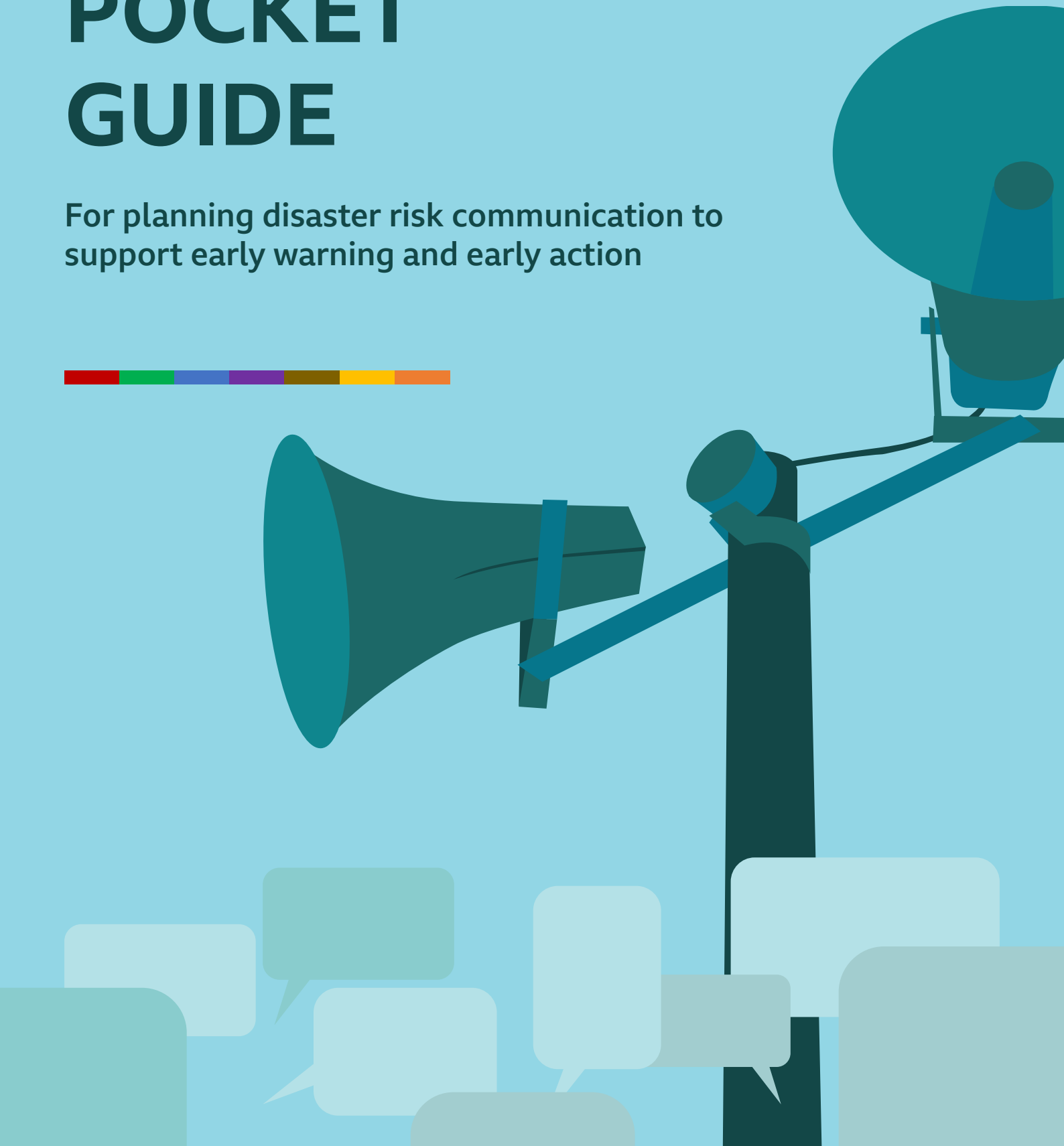
RiCA
Risk Communication for Early Action

POCKET GUIDE

For planning disaster risk communication to support early warning and early action



This Pocket Guide was produced by BBC Media Action under the Risk Communication for Early Action (RiCA) project. The project ran from November 2023 to June 2024, funded by the United States Agency for International Development (USAID) and in partnership with the United Nations Office for Disaster Risk Reduction (UNDRR).

By creating resources and forging connections among practitioners from across government, the media, technical backgrounds and civil society, RiCA aimed to increase the ability of actors to communicate about risk more effectively to support early warning and early action.

BBC Media Action is the international development charity of the BBC. It works with partners around the world to provide impartial, impactful, trustworthy media to people in need so that they can make informed choices to transform their lives. In a world of disinformation, distrust and division, we share the BBC's values, skills and experience to bring people together, and foster greater understanding and trust.

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ABOUT THIS GUIDE

The aim of this guide is to provide simple guidance and practical tips for practitioners planning effective disaster risk communication strategies that support early warning and early action.

It will help you maximise investments in risk communication by:

- Designing communication that reflects behavioural science and informed decision-making among populations
- Collaborating with practitioners across disciplines to prepare effective public communication strategies and content

While it is not a comprehensive guide for how to manage complex challenges such as communicating uncertainty, visualising risk data or increasing trust, it signposts to key resources that provide in-depth insights on many important areas.

The primary users of the Pocket Guide will be practitioners - from any sector - who are planning public risk communication strategies with the general public.

This may include civil servants, media and communication professionals, civil society and grassroots organisers, or others.

The guide encourages collaboration among practitioners across disciplines
and is written to contribute to a shared understanding of disaster risk communication strategies from a range of backgrounds.

The guide is primarily written for practitioners in low-income countries, assuming minimal resources, but the principles can be applied in almost any context.

A copy of the Pocket Guide and its companion, the RiCA Guide for Essential Research, can be found on the BBC Media Action website. In addition, both guides, including an online version of the Pocket Guide, can be found on the PreventionWeb website.

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KEY TERMINOLOGY

Actors

A person or group that is involved in or has interest in something related to disaster risk communication, including partners, collaborators, allies, participants, associates or stakeholders. They may not be part of any formal agreements or memoranda of understanding. They may be involved in project-based or time-limited relationships.

Actors in disaster risk communication might include at-risk populations, local journalists, researchers, disaster risk management experts, local and national organisations from the humanitarian, development, education, scientific or private sectors.

Channel

Media or communication distribution methods, mainly print, broadcast (radio and TV), digital platforms (online or not), film, performances, face-to-face, etc.

Dialogue

Disaster risk communication involves multiple actors regularly giving and receiving information. Effective communication should support an inclusive, dynamic, informed exchange of information in many directions, among many stakeholders. "Two-way communication" can imply that information flows only between your organisation and a target group, failing to reflect the dynamic exchanges between multiple actors that occur. "**Feedback**" is important, but can imply that the starting point is your communication agenda rather than that of the target group.

Disaster risk

"The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time" (UNDRR). These risks reflect local vulnerabilities to natural hazards, and capacities to mitigate those risks. Social and economic contexts, and people's varied perceptions of risks and underlying factors, all have a bearing on disaster risks.

Disaster risk communication

An interactive process between individuals, groups and institutions of exchanging information and views about the nature of disaster risk, concerns about these risks, and reactions to disaster risk reduction activities or messages (Adapted from the US National Research Council Committee on Risk Perception and Communication).

Disaster risk reduction

This process aims to reduce existing disaster risks, prevent new risks and manage any remaining risks, to help strengthen the resilience of at-risk populations, locations or systems.

Early warning system
"An integrated system of hazard monitoring, forecasting and prediction, disaster risk assessment, communication and preparedness activities systems and processes that enables individuals, communities, governments, businesses and others to take timely action to reduce disaster risks in advance of hazardous events (UNDRR)."

Format
The nature of media or communication content, eg audio, visual or text.

Genre
A type or style of media or communication, eg news, drama, comedy, music, etc.

Natural hazards
Natural hazards such as hurricanes, earthquakes or floods only become a disaster when it affects a population that is unprotected. Poverty, exclusion, social disadvantage and weak governance around risks are factors that increase people's exposure and vulnerability to natural hazards. These factors are not natural so it is best to avoid the term "natural disaster", in line with UNDRR guidance.

Talking points
Specific issues that target groups are encouraged to discuss – coupled with relevant, factual information to inform productive dialogue. The term "**message**" can imply a top-down, one-way information flow. While "messages" are sometimes entirely appropriate (eg early warnings or for critical actions), it does not reflect an inclusive, dynamic exchange of information necessary for disaster risk communication or encourage dialogue, which is often a precursor for action.

INTRODUCTION

Disaster risk communication, early warning and early action

Disaster risk communication, early warning and early action. Natural hazards are becoming more intense and more frequent because of climate change.[1] At the same time, people are increasingly exposed to hazards because of increased urbanisation in hazard-prone areas. More than half the global population lives in cities – and 2.5 billion people are likely to join them by 2050.[2] Urban dwellers' vulnerability to hazards is compounded by poverty and inequality, which limits people's ability to invest in preparedness measures and resilient infrastructures.[3]

The clash of these two factors draws the already insufficient resources toward disaster recovery measures rather than investing in addressing their root causes.[4]

An important tool to improve disaster risk management and resilience is multi-hazard, people-centred early warning systems.[5] However, the successful dissemination of early warnings don't always result in early action. Misunderstanding, mistrust, uncertainty about what to do, psychological barriers, and social or cultural influences all contribute to people's decision-making.[6]

These challenges highlight the need for a comprehensive approach to enhancing EWEA systems, addressing technological and infrastructural gaps as well as the individual, social and institutional factors that influence their effectiveness. One such approach involves **using media and communication, which can not only disseminate early warnings, but also prompt informed dialogue and shift how people think, feel and act in response.**

Media and communication can increase the effectiveness of early warning systems by:

- Making them people-centred, enhancing their design and reach[7]
- Improving people's understanding of natural hazards and their vulnerability to them, while respecting local priorities and perspectives[8]
- Challenging misplaced or ill-informed beliefs, perceptions and practices to support better disaster risk management and timely, appropriate action

[1]World Meteorological Organization (2023) Early Warnings For All Initiative scaled up into action on the ground
[2]UN Climate Chance (2017) Rapid Urbanization Increases Climate Risk for Billions of People
[3]UNDRR (n.d.) Underlying disaster risk drivers
[4]UNDRR (2023). GAR Special Report: Mapping Resilience for the Sustainable Development Goals. Geneva. P. 12.
[5]EWEA systems are relatively cheap to set up and provide more than a tenfold return on investment. See: World Meteorological Organization (2022) Early Warnings for All Action Plan unveiled at COP27
[6]UNDRR (2023). GAR Special Report: Mapping Resilience for the Sustainable Development Goals. Geneva. Pp. 21–22.
[7]BBC Media Action (2021) … and Action! How media can address climate change in countries most affected
[8]UNDRR, GAR22: Our world at risk, p.125.

When early warning doesn't prompt early action: An example

Research from Somalia highlights reasons why people didn't react to early warnings: Severe flooding occurred in Somalia in late 2023 as a result of the El Niño weather system. As part of the RiCA project, BBC Media Action conducted research with people who had experienced flooding in conflict-affected areas of Baidoa and Mogadishu. This research aimed to understand whether people received early warnings and, if so, what actions they took in response. Participants included internally-displaced people living in camps, and community leaders.

Nearly all participants reported receiving early warnings about the risk of flooding, via social media, radio and TV news segments and discussion programmes.

Most participants found the warnings relevant and timely. They found much of the information clear, specific and actionable, such as advice to boil drinking water, avoid fishing, avoid walking in floodwaters unplug electrical appliances and evacuate in the worst cases.

While some respondents did follow this guidance, most did not. Respondents cited several reasons for this:

- Believing that forecasting the weather went against religious principles: that only God knew what the weather would be and that any negative impacts were God's will.
- Distrusting the information received
- Fearing being unsafe if they left their settlement areas
- Having insufficient resources to take recommended actions

> "I thought that these people are committing sin by talking about the rain, which is something that is given by Allah. I did not know that there is a science of weather forecasting."
>
> -Abdi, a 36-year-old husband and father in Mogadishu

How media and communication can support early warning systems

The UN Secretary General has called for everyone on Earth to benefit from early warning systems by 2027. The Early Warnings for All Action Plan outlines four activity pillars.[9] Media and communication can support across all four areas.

Pillar 1 – Knowledge of disaster risks

Media and communication can help people to understand the complexities of multiple hazards, their potential impacts, and what can be done to address them. They can create platforms to share and discuss local, Indigenous and scientific knowledge widely.

Pillar 2 – Detecting, monitoring and forecasting hazards

Media and communication can provide a way to widely share and discuss locally-observed information, insights and possible actions to increase understanding and trust in monitoring systems and boost community involvement in designing early warning systems.

Pillar 3 – Warning dissemination and communication

Media and communication is vital in reaching populations with early warning information quickly and at scale.

Pillar 4 – Preparedness to respond

Risk communication can help improve individual, group and organisational preparedness to take action by providing a platform to discuss and address barriers to action, such as perceptions and beliefs about risk, livelihood concerns and the availability of resources, local risk management, risk governance and public investment.

Note: Different government agencies will have a legal mandate to issue warnings, which vary country to country. WMO collaborates with ITU to maintain the Register of Alerting Authorities in which governments register agencies with the mandates to issue warnings in their countries.

WMO and ITU also collaborate to support countries to issue warnings in the Common Alerting Protocol (CAP) Standard format.

[9]UNDRR (n.d.) Early warnings for all (EW4All)

PROCESS

A process for disaster risk communication

BBC Media Action recommends a basic process to guide disaster risk communication, with four phases and related activities that circulate in a continuing loop (see Figure 1):

1. **Understand** – Take time to assess the people, problems and context related to your topic – including the local media and communication context
2. **Plan** – Consider exactly what you aim to achieve with your communication, how it will happen, and why you think it will work
3. **Do** – Communicate in ways that reach and resonate with your audience and support your specific aims
4. **Improve** – Learn from what worked and what did not, over the short-term and longer-term

Three cross-cutting principles apply across this process: **collaboration** with actors from different sectors, **creativity** to overcome challenges, and **learning** for consistent advancement.

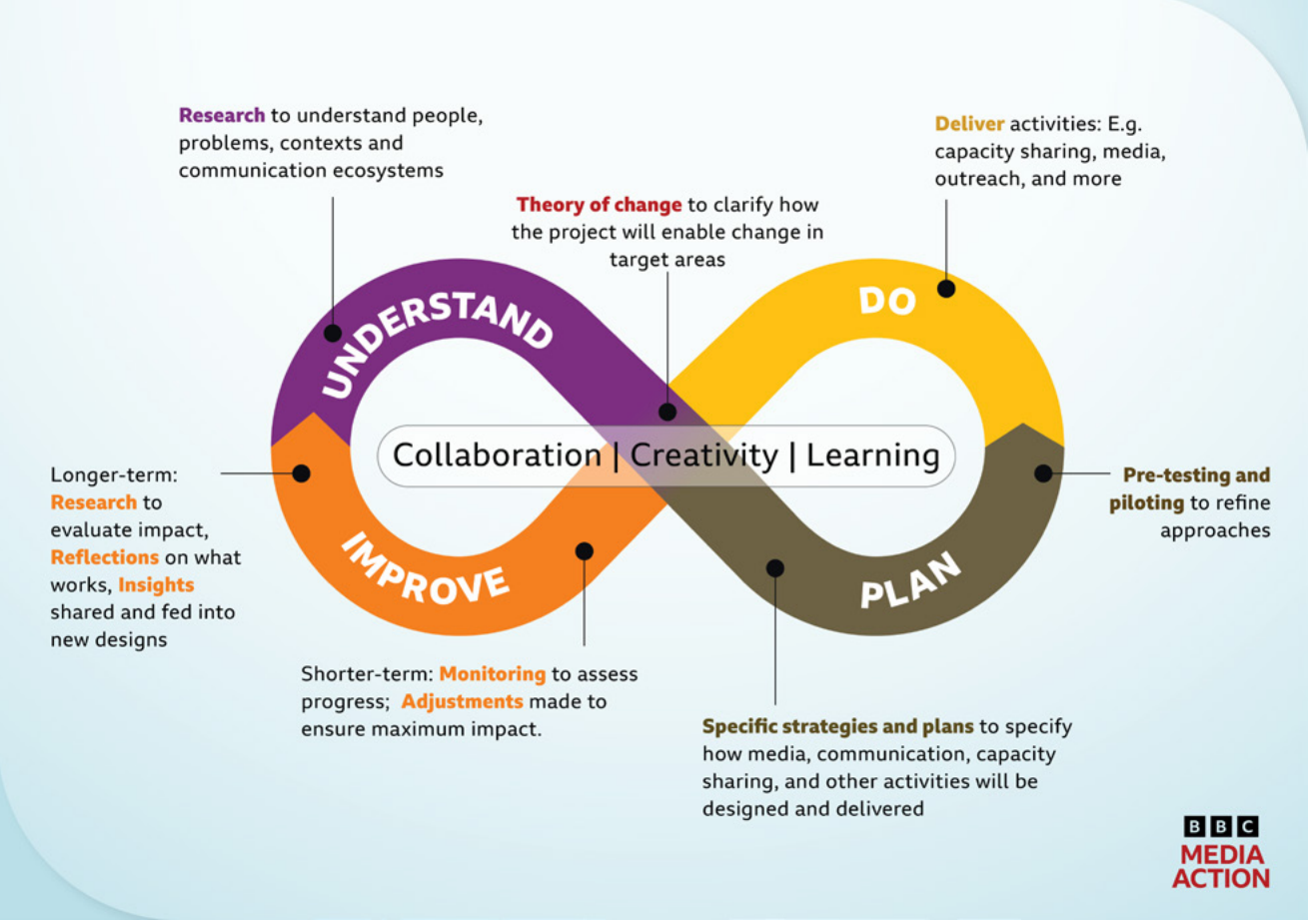
The process encourages use of a "theory of change" – an approach commonly used in development and social change that explains what changes the initiative aims to achieve, how and why that will happen.

The disaster risk communication 'loop' proposed is a dynamic process, not a linear one. You might end up moving back and forth between the different segments. For example, after understanding a problem and starting to plan, you may need more information to inform your plan. Likewise, once your communication activities have started (in Do), you may need to fine-tune your objectives, backing up to 'Plan'.

Resources: PROCESS

- World Health Organization (2018) Communicating risk in public health emergencies: a WHO guideline for emergency risk communication (ERC) policy and practice

Figure 1: The disaster risk communication loop



PRINCIPLES

Top tips:

- Collaboration: Work with practitioners across disciplines to maximise accuracy, relevance, and creativity
- Creativity: Find unique ways to overcome barriers to communication and action
- Learning: Advance risk communication for your own goals and the wider sector by listening, adapting, and measuring impact.

Collaboration

This guide follows the Sendai Framework's All-of-Society inclusive approach[10] . It supports the principle of making disaster risk reduction practices **more multi-sectoral and applicable to multiple hazards, and engaging all relevant stakeholders.**

The importance of multi-sectoral approaches to support effective early warning systems is increasingly recognised, yet remains challenging. "Knowledge brokers" play an important role in translating across different sectors (Gluckman 2021) yet they often exclude media and creative communicators.

Disaster risk communication is most effective when it includes multiple actors throughout the process:

- Government agency staff carry the remit and resources to communicate with the public about policy decisions and actions intended to keep people safe.
    - ⁕ When working with civil servants, recognise the multiple pressures in complex governance systems and that singular solutions may not be feasible. A solutions-oriented approach to dialogue may bring better results than adversarial discussions.
- Technical experts bring insight and knowledge to inform decision-makers' actions.
    - ⁕ When seeking technical experts to work with, identify experts with knowledge relevant to the issue at hand and do not encourage them to comment beyond their field of expertise.
- Media practitioners, artists and other creative communicators can connect deeply with audiences, engage them on difficult issues and facilitate challenging conversations about change. But turning data into engaging content requires time, resources and knowledge that are scarce, especially in poorly-funded media markets. Private sector stakeholders, including mobile network operators, should be considered as well.

- When approaching journalists, come with ideas that make their jobs easier, such as interesting stories, simple language, ready-to-go interviewees and insight into how disaster risk affects media audiences' everyday lives. Seek to collaborate as equals and avoid the notion of "using" media to convey your talking points, which can raise concerns about compromised editorial and creative independence.

- At-risk populations and community representatives must be central stakeholders in disaster risk communication. They have local knowledge about barriers and solutions, and the power to influence their family members and peers. Including at-risk populations in disaster risk communication can enhance their engagement and ownership of the process, build trust and credibility in it, and improve its accessibility to all target audience members, including women, children, people with disabilities and other marginalised groups.

  - Communicate *with* populations not *to* them. Listen to their priorities, which might not match yours. Your level of engagement with populations will vary as appropriate to your task. For example, urgent evacuation warnings leave no time for discussion. But where evacuation sites are placed and the lead time required to arrive can be improved through discussion with populations.

[10]UNDRR, Inclusive disaster risk reduction means resilience for everyone

Population engagement ladder

The example population engagement ladder below shows different ways to engage target audiences. On one end of the ladder is "inform", which focuses on one-way information sharing with a target audience. At the other end is "defer/empower", in which the audience owns the process.

Base your population engagement methods on what you aim to achieve. In general, greater audience ownership makes a population engagement process more effective and sustainable. However, depending on the disaster risk communication objectives and the stakeholders involved, other engagement methods such as "partnership" might be more appropriate.

Ladder rung	Level of target audience/ population involvement	Example
Inform	The population receives relevant information but is not involved in the design or decision-making process	A hurricane is approaching: Evacuate to shelters now
Consult	Population members are asked about their opinions on the design of disaster risk but decisions are made by others	What would help women and children feel safer in hurricane shelters? Decisions taken may not reflect answers received
Involve	Population members are asked about their opinions on disaster risk decisions, but the final say is left to others	Where do you think we should build hurricane shelters? Final decisions taken may not reflect answers received
Collaborate/ partnership/ co-design	Disaster risk design and decisions are negotiated between population members and other actors	Let's work together to design these shelters
Defer/ empower	Population members lead, plan and execute disaster risk measures	Here's funding to build a shelter however you want… Oh, you'd rather build a bridge!

Creativity

Addressing climate change and natural hazards arising from it is one of the biggest challenges of our time. The scale of the problem and the barriers to action both require radical innovation.

Strong emotions can limit people's ability to engage with this issue, while the data and science to support disaster risk reduction can feel inaccessible, irrelevant or overwhelming – causing people to feel hopeless and resigned to their fate.

Creativity is key to overcoming these challenges. Innovative communication can make challenging subjects more accessible, understandable and easier to engage with. It can capture people's attention, foster empathy, galvanise agency and provide a sense of urgency. It can spark problem-solving and more effective plans.

Creative professionals (including artists, media practitioners and advertising specialists) can use their talent and insights to make content resonate with target audiences. Invest in strong creative skills, for example from local musicians, poets or storytellers, and allow them to follow their own creative processes, in line with guidance from technical partners. Members of the community often have their own real-life stories that are catchy and authentic. Content creators should identify these interesting and influencing stories from the population.

Learning

As noted above, disaster risk communication is an ongoing, iterative process in collaboration with affected populations that adapts to changes over time and continuous learning.

Managing risk involves constant vigilance and information exchange among different groups of people. As new information comes forth – whether from scientific research, technological advancements, emerging risk, or community opinion and experience – you need to update and adjust your risk communication plans accordingly.

This continuous cycle of learning and adaptation helps to build trust and credibility with populations, as they see that disaster risk communicators are responsive and committed to providing the most accurate, up-to-date, relevant and actionable information.

Learning involves engaging with stakeholders, including at-risk populations, to understand their perceptions and concerns.

Assessing the effectiveness of your disaster risk communication requires investing in impact research to identify what works and what does not and why, and making necessary improvements.

Resources: PRINCIPLES

- C40 Cities Climate Leadership Group (n.d.) Inclusive community engagement playbook
- Golding, B, World Meteorological Organization and UNDRR (2022) Towards the "perfect" weather warning: Bridging disciplinary gaps through partnership and communication.
- Risk-informed Early Action Partnership, Five components of effective early warning communication. (This document was developed in parallel to this RiCA guide, with a focus on the risk culture, the policy environment and the information ecosystem required for effective early action.)
- UNDRR (2018) Strategic Approach to Capacity Development for Implementation of the Sendai Framework for Disaster Risk Reduction, Section 4: Stakeholders and Partners

UNDERSTAND

Top tips:

- Take a systemic approach to understanding what influences disaster risk and target your communication accordingly.
- Gather as much information as possible to deepen understanding of your focus area

Consider what influences the issue

Effective disaster risk communication will focus on a clearly defined issue.

Whether you already have a specific issue in mind or are looking to define one, it can be helpful to reflect on the wider context around the issue.

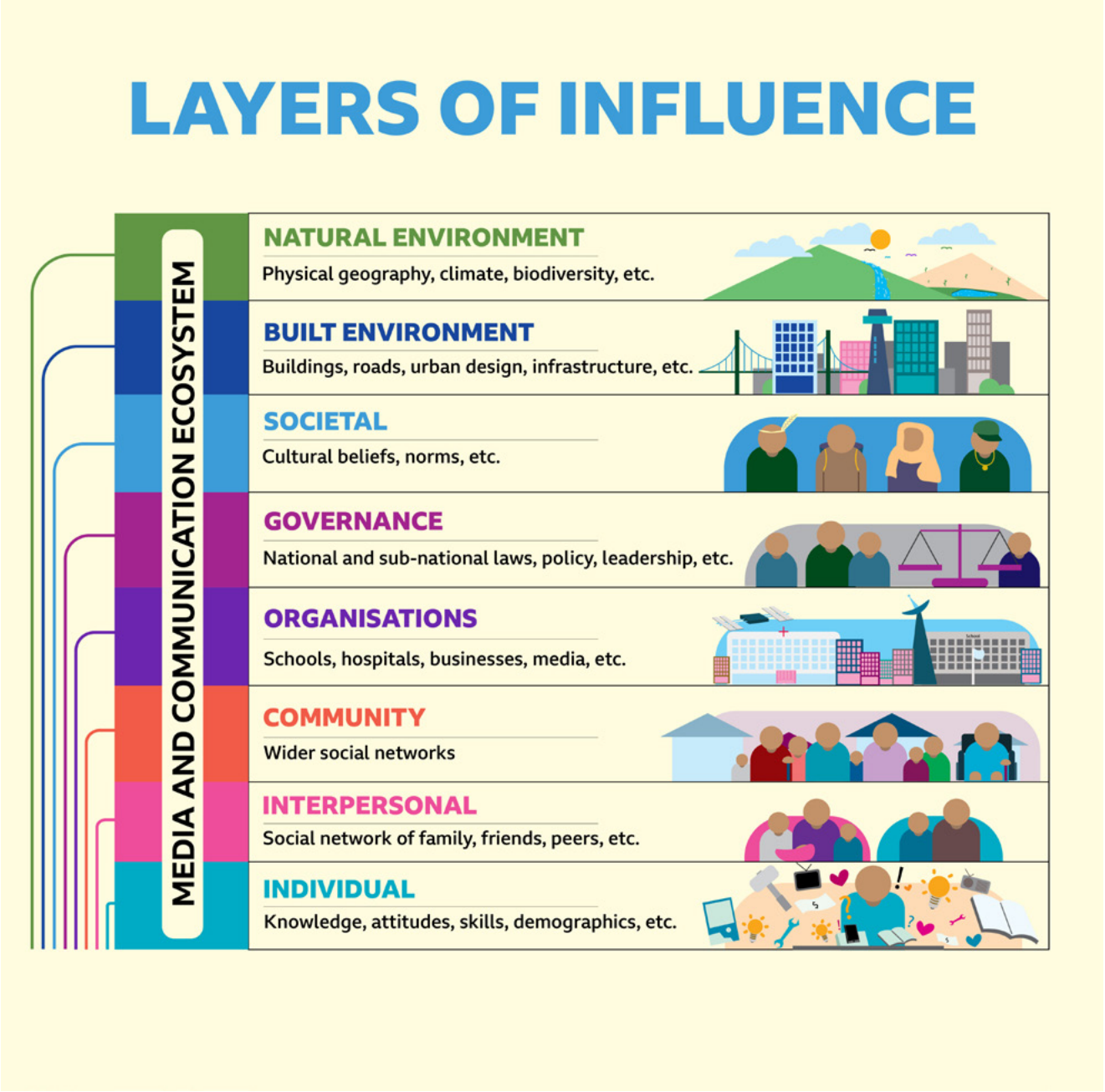
The model below (see Figure 2) can help you consider what influences an issue and the complex interplay between these factors.

Individual behaviour, social networks, government policy, and more, can all interact to exacerbate the issue or drive positive change.

For example, in some locations, gender norms may encourage males to take high risks to demonstrate an expected form of masculinity. And in some locations, women may be scorned for leaving home unaccompanied and therefore fail to evacuate when necessary.

Examining a problem through the categories in this model can help you identify contributing factors and opportunities for change. This can help inform how you prioritise your efforts with the resources available.

Figure 2: Layers of influence for individual and social change



Adapted from the Socio-ecological Model (Brofenbrenner) and the Human Ecology Model (Barton and Grant)

Human behaviour: Risk perceptions and cognitive biases

You need to understand how people perceive risk to understand key barriers to, and drivers of, disaster risk reduction.

People's perception of risk, and how they process information or make decisions, can be influenced by irrational reasoning.

Meyer and Kunreuther[11] identify six decision-making biases that influence most disaster preparedness errors:

- **Myopia** – focusing on the short term and immediate costs when considering possible protection measures
- **Amnesia** – forgetting lessons from previous events
- **Optimism** – underestimating the likelihood of problems from future hazards
- **Inertia** – making no changes or keeping a default position in the face of uncertainty
- **Simplification** – focusing on only a few relevant facts when considering choices
- **Herding** – copying what other people do

A disaster risk communication goal might aim to change people's perception of risk and therefore their behaviour. Even if your goal is less focused on altering risk perception, it is still crucial to understand your audience's perceptions to ensure they engage with and act upon your talking points as intended.

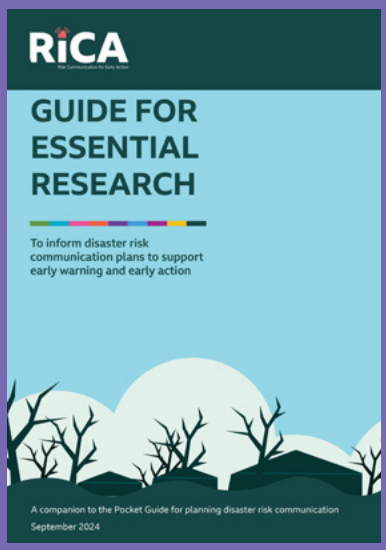
Gather information

Your initial consideration of what influences the issue should have identified many questions. With the resources you have, find out as much as you can to start answering those questions, involving as many actors as you can. This might include efforts to understand the population group exposed to disaster risk, the problem and the wider context to inform a tailored disaster risk communication plan.

You will also need a clear understanding of the media and communication environment to identify a range of issues, including what sources of information your target audience trusts, how they share information, what languages they prefer to use, who influences them, and any overlooked groups or communication needs.

Ideally, you will have sufficient time and funding to conduct primary research to develop an evidence-based communication plan. However, even with very limited resources, you can find out valuable information from reading reports or having a series of conversations with people from different groups and practitioners from different sectors who can deepen your understanding of the situation.

The RiCA Guide for Essential Research for disaster risk communication contains extended guidance that will help you gather information across the layers of influence in the model above. It provides resources for managers and communicators to guide desk research as well as resources for researchers conducting primary research.



It covers key research questions, desk research sources, possible methodologies and suggested interview questions to consider using to help you better understand at-risk populations, underlying problems and local contexts.

Topic areas span the 'Layers of Influence' on page 18 above: Individual factors (eg demographics, vulnerable groups, risk knowledge, perceptions, attitudes and actions); Interpersonal networks, Community networks, Organisations (eg media, private sector, schools, etc), Societal factors (eg religion, nature, gender); Governance (eg risk governance and conflict); and Media and Communication ecosystems in relation to individuals, networks, organisations and governance.

[11]Meyer, R and Kunreuther, H (2017) The Ostrich Paradox: Why we underprepare for disasters. Wharton Digital Press. Ebook available at: 978-1-61363-079-2

Scenario: understand – life and risk in 'Pacha-Pacha'

Your desk research revealed the following:

In the fictitious area of Pacha-Pacha the **natural environment** consists of a long coastline, open plains and high mountain cliffs. Natural hazards include seasonal storms and flooding, earthquakes, and tsunamis.

The **built environment** in coastal towns consists of relatively strong buildings, paved roads, and a number of boat docks of varying grade. Further inland, roads are mostly unpaved and buildings are mostly weak.

In **society**, gender norms are relatively traditional, favouring men, and collectivist approaches are preferred. People are not outwardly religious but believe God protects the good.

The **governance** system is democratic, but increasingly heavy-handed with opponents. Risk governance is relatively strong, but rural areas are neglected.

Your desk research revealed the following:

Public sector organisations (schools, hospitals, etc.) The Met Office monitors and communicates about climate and weather information with impact-based forecasting, but it's jargon heavy and hard to find online. When hazardous conditions are expected, the National Disaster Management Agency communicates warnings, especially on storms, heavy rainfall, severe winds and high temperatures.

Media organisations include a state broadcaster, but most are commercially driven. Practitioners across these sectors are moderately skilled. Many are motivated to serve the public although business demands limit their ability to do so. Most stations relay weather forecasts to their audiences word-for-word at least once a day, but they don't always understand the content. Some stations don't include forecasts because they're not seen as useful enough for audiences. During severe conditions, media practitioners may comment informally about the announcements and run hazard-related stories that also appear online. When they're ill-informed, their comments can generate misinformation.

You determined that fisherfolk were particularly vulnerable to storms due to the nature of their work on the sea and inconsistent access to early warning systems while out.

You conducted primary research among fisherfolk and learned the following:

Community networks among fisherfolk are particularly strong. They enjoy a bond as a trade, look out for each other's safety, especially as storms near, are highly cautious to not pass on false or misleading information, and are generous sharing profits with the community.

On issues of disaster risk, fisherfolk are trusted and influential among their interpersonal networks (such as close friends and family) because they are seen to have a strong understanding of weather systems and good judgement on risk-taking.

Individuals in the fisherfolk community are cautious about threats from natural hazards that could jeopardise their lives or livelihoods and are moderate in risk taking.

Many (but not all) invest in radios that will give them access to early warnings out at sea, but boats that go far off shore struggle to get good reception.

Divers will note changes among the sea creatures that indicate approaching storms.

Young fisherfolk lack knowledge (technical and indigenous) that impact their risk perception and decisions.

Resources: UNDERSTAND

- RiCA (2024) Guide for Essential Research: To inform disaster risk communication plans to support early warning and early action

PLAN

Top tips:

- Set a goal that defines the change you want to achieve
- Set objectives that help reach your goal, defining how that change will happen, based on evidence-based insights
- Make your goal and objectives SMART: specific, measurable, achievable, relevant, and time-bound
- Identify audience(s) through demographics, psychographics, knowledge, experience, mental models, influence, and more.
- Prepare 'talking points' (or messages) that encourage sharing knowledge, informed discussion, debate, and decision-making.

Goal: What change do you intend to achieve?

Based on insights gained through the UNDERSTAND process, you need to define a specific goal you intend to achieve through your disaster risk communication. This overarching and long-term aim will provide you with a general direction and purpose for your communication plan.

When setting your goal, consider:

- What change do you ultimately want to see? Clearly articulate the desired outcome of your efforts. This should be a specific, tangible change that is feasible given the time and resources you have.
- Why are you focusing on this change and how can media and communication help? Define the rationale behind your goal and articulate how the communication will support higher level disaster risk management goals.

Objectives: How will change happen?

The next step is to break down your goal into actionable steps (objectives) to create change towards achieving that goal.

These objectives will be about changes you will create with your target group – not activities. For example: "…We will increase knowledge about safe evacuation routes" is an objective. "We'll hand out paper maps" is a communication activity you would do to increase knowledge.

Smart goals and objectives

Your stated goal and objectives should be SMART:

- **Specific**: Be clear about what exactly you will do
- **Measurable**: Define the measurements (metrics) you will use to track progress towards your goal and determine when it has been achieved.
- **Achievable**: Consider the resources, time and support available to you and be realistic.
- **Relevant**: Ensure objectives address the specific needs or barriers identified during your UNDERSTAND process and ideally align your objectives with broader disaster risk management plans for the area (your own or that of leading agencies).
- **Time-bound**: Set a clear timeline for achieving your objectives so you can track your progress.

For example, a non-SMART objective is: “To raise awareness”.

A SMART alternative is: “To increase the number of newly arrived residents between the ages of 21-30 who understand what natural hazards exist in the area and how to manage them (specific), by 20% (measurable) within one year (time-bound). This is relevant because research shows that an influx of young migrants (within this age group) to the area over the past 18 months come from far-away locations and are unfamiliar with threats in the area. Whether it is achievable would depend on real-life resources and other contextual factors specific to the area.

Avoid “awareness raising” goals and objectives

Unless you are dealing with a previously unknown risk (like COVID-19 or Mpox), the target audience is likely to be aware of it. They may also know what to do about it, even though awareness may not lead to action.

Instead, describe precisely what change you want to see among the target group. It might help to describe how people will think, feel or do things differently as a result of your disaster risk communication.

Keep it real

When devising your disaster risk communication goal, objectives and content, focus on changes or actions that are realistic for your audience, practitioner or organisation:

- What can people do themselves, that is not dependent on the action of others? What resources are available to them?
- What structural barriers might prevent action that you cannot address as part of your initiative? Eg poverty, lack of infrastructure or poor governance.

Audiences: Who you will communicate with and why?

If you target everyone, you target no one. Consider targeting your communication to specific audiences with common characteristics, such as:

- **Demographics:** eg age, gender, location, religion, income levels or literacy
- **Psychographics:** eg values, social interests, desires, personal goals, interests or lifestyle
- **Knowledge and mental models:** eg level of disaster risk knowledge, risk perception and current behaviour.
- **Influence and power to change the situation:** Targeting the most at-risk groups and urging them to take action may place an unfair burden on them. Consider other decision-makers who can influence the situation.

Connections: How you will reach and engage audiences?

Your previous work in understanding the media environment will help you to identify the best way/s to engage with your target audience, including the best communication channels, formats and styles to use. Based on this understanding, make decisions about the right channels and formats for your purpose:

- **Reach:** What channels reach your target audience, and at what times of day? For example, radio might be widely popular, but inaccessible to fishers when they face storms at sea. Remote, mountainous populations may have mobile phones, but leave them at home for safekeeping when they are out farming in areas at risk of landslides.
- **Trust:** Which information sources does your target audience trust, and for what type of information? Sources might include local leaders, media sources, and more.
- **Preferences:** How does your target audience prefer to share and receive information? When and how do they want news, entertainment and alerts? When sharing their opinions and experiences, do they want anonymity? Does this vary depending on the topic? What formats are most accessible and understandable? What languages do they prefer to receive and share information in? Does that differ when spoken or written?
- **Your objectives:** Select media and communication formats that match what you are trying to achieve. For example, conveying technical information, challenging social norms or generating inclusive public discussion at scale will require different tools.
- **Previous efforts:** What does your target audience think about any current or past disaster risk communication efforts? How successful were they in achieving their objectives or goals? Every communication plan will differ based on its goal and context, but insights from past efforts can be useful in tailoring new approaches.
- **Your budget:** Which combination of channels and formats are the most feasible match for your aims, ambitions and budget?

Strengths and limitations of key communication channels and formats

CHANNEL	Strengths	Limitations
PRINT, eg newspapers or leaflets	• Remains available for future reference • Can be more tailored than broadcast • Can include both visual and text • Can be passed on to others	• May be less engaging than other channels • May cost more to achieve same reach as broadcast or digital • Text requires literacy, but visuals don't • Low reach where print is in decline
BROADCAST, eg Radio and TV	• Extensive reach • Efficient and consistent • If trusted, can set agendas and legitimise information and actions • Opportunity to integrate with social media and gain even wider reach	• Limited interaction with audiences except for participation components (via social media, phone-ins, interviews, etc.) • Available only at certain times • Not available for future reference • Limited ability to personalise • Requires technology • TV (and to a lesser extent radio) can have high barriers to getting included in programming schedules and requires high skills and cost.
MOBILE AND DIGITAL, eg SMS, social media, websites, blogs	• Can be personalised to audience • Can be interactive • Rapid reach • Potential for extensive reach • Easily adaptable • Remains available for future reference • Can be accessed on demand	• Requires technology, literacy, and cost to access internet/mobile data • Gender digital divide to access, use, benefit from digital spaces • Trust levels widely vary across online sources and audiences • Highly susceptible to mis-/disinformation • It can be difficult to stand out for audiences; new information is constantly required
FACE-TO-FACE, eg discussion groups or local meetings	• Audience can drive discussion • Can be personalised to audience • Can be interactive • Allows more time and flexibility to cover complex information, build audience members' skills, and generate trust and influence	• Lower reach • May be relatively expensive at scale • Time-consuming
FORMAT	**Strengths**	**Limitations**
TEXT	• Can provide specific, detailed information	• May be less engaging than other formats • Requires more time from the audience • Requires literacy • Language may present additional barriers
AUDIO	• Less costly to produce than visual • Enables audiences to multi-task, eg travel or work while listening to audio (radio or podcasts) • Allows anonymity for contributors	• Lack of visuals can limit ability to convey complex information • May require partnering with already popular stations or shows to reach a wide audience
VISUAL	• Can demonstrate actions visually • Audiences can see "people like me" • Can be highly engaging	• Can be costly to produce well • Requires greater attention from audience (limited multi-tasking)

The potential of media and communication

- **Reach** people with reliable, consistent information at scale relating to disaster risk reduction
- **Engage** people on difficult issues related to disaster risk and early warning that they may otherwise find dull or daunting
- **Provide a platform** for inclusive, respectful dialogue, discussion and debate – even on sensitive topics relating to disaster risks
- **Include** groups that are less visible in society, enabling their participation in disaster risk reduction initiatives
- **Challenge** harmful norms and role model positive behaviour, making seemingly difficult actions more achievable

Talking points: What you will communicate about?

Discussion is often a precursor to action, so consider how to generate informed discussions among your target audience around disaster risks.

Discussion topics might include:

- How they understand, think, feel or act in response to natural hazards
- What information people need to make decisions relating to disaster risks
- What perceptions they have around risk and what influences that
- Uncertainties relating to disaster risks
- What is considered "normal" within their social circles in relation to reducing their vulnerability to disaster risks. What will help to challenge negative norms and practices, such as avoiding the topic altogether or leaving others to act.

Communicating uncertainty

One of the biggest disaster risk communication challenges is informing audiences of something that may – or may not – occur, its likelihood of happening, and its possible impacts. This communication will affect how much time, energy and resources people will invest in disaster risk reduction – and how they react when a natural hazard takes place.

It can be difficult to communicate about uncertainty, but don't shy away from it. Failing to communicate at all can leave an information vacuum quickly filled by rumour. Instead a general rule of thumb is to communicate what you know, what you don't know, and if relevant, that guidance may change as new information emerges.
Resources to communicate uncertainty:

- Spiegelhalter, D (2017) 'Risk and Uncertainty Communication' in Annual Review of statistics and its Application, vol. 4

Inform or persuade?

Generally, disaster risk communication should aim to present factual, unbiased information so people can make informed decisions. If your aim is to persuade people, you should acknowledge this and explain why.

If you want to provide information so people can make informed decisions, consider what biases you might bring to this. When choosing what information to share and how, consider how your agenda matches or differs from that of your target audience.

If you want to persuade people to change their attitude or behaviour, be clear about your agenda. By urging audiences to prioritise your issue, will they deprioritise another? What impacts might that have?

Communication that leaves audiences feeling coerced or manipulated into thinking a particular way can undermine trust, and build resistance to future dialogue around disaster risk reduction and potentially lead them to take harmful actions unintentionally.

Adapted from Freeman, A (2018) Facts, risks and emotions

Scenario: Planning to communicate with fisherfolk in Pacha-Pacha

Based on the research described in the scenario above, you and peers in other sectors have agreed on the following goal and objectives:

Goal: To increase the number of fisherfolk in Pacha-Pacha who report they received early warnings that helped them make decisions and take actions to stay safe.

- Objective 1: Organisations and collaboration - To improve the connections among practitioners from different sectors, including government (Met Services and Emergency Management), media (public and private), and civil society (fisher associations) to identify ways of improving communication and early warning with fisherfolk

- Objective 2: Organisations and skills – To improve practitioners' ability to communicate more effectively about hazards, eg How to convey complicated terms, how to deliver these on broadcast media with clarity, and how to reach fisherfolk face-to-face.

- Objective 3: Organisations and reach – To increase the number of radio stations with large broadcast footprints that include weather forecasting tailored to fisherfolk. (Facilitated by greater access to forecasts that are appealing to their audiences – from Objective 2).

- Objective 4: Individuals – Fisherfolk – To increase the number of fisherfolk who prioritise having good quality radios when they go to sea. Eg They have purchased, or are saving to purchase, or expect boats to have them before boarding.

- Objective 5: Interpersonal – To increase the exchange of knowledge between older and younger fisherfolk about weather forecasts, early warning, and risk reduction.

You will reach these aims by connecting with target groups on the following topics:		
Target Groups	**Connector**	**Talking Points**
Practitioners – Government, Media, Civil Society	Face-to-Face: workshops, job-swaps, roundtable discussions	What makes it difficult for you to communicate early warnings for fisherfolk? What would make it easier? How can you work better together?
Met and Media practitioners	On-the-job mentoring	How will you present forecasts and other information that appeals to fisherfolk? How will this bring in audience figures?
Fisherfolk	Radio: Daily programme in local language Social media: To comment, share and expand on radio content Face-to-face: Discussions in bars and cafes, facilitated by local leaders, to build on radio discussions Radio: alerts and early warnings Mobile phones in range	How are fishing practices changing? How sustainable is it? What new technology is available? How does that help us earn more, protect the sea, stay safe, etc? How much do you spend on a good radio? Would you buy your partner a cheaper anniversary gift to afford a better radio? Why? What knowledge do older fisherfolk have from generations past? What do you know about tsunamis? Impact-based forecasts and what actions should be taken in response.

Resources: PLAN

- Compass (n.d.) Social and Behaviour Change How-to Guides
- Global Network of Civil Society Organisations for Disaster Reduction (n.d.) Risk-Informed Development Guide: A practical approach to risk-informed development for civil society organisations and communities most at risk
- IFRC Public awareness and public education for disaster risk reduction: action-oriented key messages for households and schools
- IFRC and Save the Children Public Awareness Public Education (PAPE) & the WhatNow Service: Localizing action-oriented messages
- National University of Singapore (n.d.) Understanding and Communicating Risk Course
- Nesta (n.d.) Theory of Change
- UCL Warning Research Centre, Anticipation Hub, Global Disaster Preparedness Center Inclusive warnings: Involving everyone in the process
- UNDRR (2023) Inclusive early warning early action checklist and implementation guide
- UN National Oceanic and Atmospheric Administration (2019) A practical guide for natural hazard risk communication

DO

Top tips:

- Make your communication IMPACTFUL: Interactive, multi-channel, personalised, accurate, clear/concise/consistent, timely, fun (or at least engaging), useful, and leave no one out.
- Seek novel collaborations and invest in making them work
- Pretest your content
- Facilitate ongoing feedback

Characteristics of impactful communication

How you go about producing the communication content will vary, depending on the channel and format. This guide won't address creative processes or step-by-step instructions, which are best agreed among the professionals involved.

However, there are nine common characteristics that should apply to most risk communication in any form it takes, to ensure it is "IMPACTFUL": Interactive, Multi-channel, Personalised, Accurate, Clear / Concise / Consistent, Timely, Fun (or at least engaging), Useful, and it Leaves no one out. Ask yourself the following questions to sense-check if your communication content is likely to be impactful.

I – Interactive
Does it enable an exchange between the audience and other stakeholders?
M – Multi-channel
Does it use multiple channels to reach audiences? This can help to reinforce information and help audiences consider their options from different angles.
P – Personalised
Does it provide information specific to audience members' situation or feature people like them?
A – Accurate
Is the information factual, and are representations fair and true-to-life?
C – Clear, concise, consistent
Is it easy to understand, not too long (for the format), and is the meaning consistent throughout, even when communicated in different channels and formats?
T – Timely
Does it reach people at the right moment, giving them time to consider and act?
F – Fun (or at least engaging)
Is it presented in a way that is appealing and relevant to the audience? Human interest content, local examples, rich visual or audio content, or drama, quiz or interactive formats may have more impact than "dull-but-worthy" advice.
U – Useful
Is it practical or actionable? Can people actually do something with the information or advice that you provide?
L – Leaves no one out
Is it accessible and inclusive in terms of gender, abilities, language, socially excluded groups and others within your target audience? Have you inadvertently excluded any people by failing to consider their needs and interests?

Novel collaborations

Push beyond conventional collaborations and consider inviting co-creators who bring fresh insight and talent. Convening artists, musicians, writers and philosophers can be a great way to connect with target groups through new perspectives, feelings and emotions – all potential drivers of action.

Getting the balance right between technical accuracy and creative flair will ensure that content is grounded in a solid technical understanding of risk but can also empathise and connect with the target audience in creative ways, to unlock pivotal conversations and actions.

Lack of collaboration among these professionals can waste time and resources, and even cause harm if content is misleading, fails to engage audiences or undermines their trust.

Collaboration may require extra effort and planning. For example, a scientist and media producer may work successfully together on a communication piece, only to have an unknowing editor change important details at the last minute, potentially causing inadvertent misinformation. Flagging your collaboration to peers and conveying what support you need to make it work out can help.

Experts in media, communication, and creativity should bring skills of their craft along with the ability to establish strong bonds and connections with the target audience and a commitment to accuracy. Conveying information that is not evidence-based or co-ordinated with disaster risk management authorities and local insights could be incomplete or misleading, which can undermine audience trust and ultimately cause harm.

Experts in technical areas should bring a solid understanding of the issue, a basic ability to convey those in terms that different audiences can understand, and a willingness to collaborate with creative communication experts. Translators can help plan how language should be accounted for throughout the process.

Common challenge: Media interviews on disaster risk – Practical Tips

News and current affairs is one of the most common formats for covering issues related to disasters and risk reduction. Interviews often inform this content and the following guidance can help ensure they result in useful exchanges that help the public make informed decisions towards risk reduction.

Effective media interviews will have:

- An agreed purpose shared by the journalist and interviewee
- The right questions for the purpose
- The right interviewee for the purpose
- Clear and focused questions and answers
- No jargon or abbreviations
- Balance (airing other opinions or giving both sides of a story)
- Factual and not misleading information
- Suggested solutions or practical actions

How journalists can conduct good interviews for DRR:

- Conduct research in advance to understand key issues and to select the right interviewee based on their background
- Put yourself in the position of the audience, and ask questions that reflect their needs and concerns
- Know what you want the audience to understand, feel and do
- Help the interviewee to give the best information they can – consider sharing questions in advance so they can prepare
- Listen to the interviewee and follow up any key points they make to help audiences
- Ask clear and simple questions, and rephrase them if necessary
- Ask one question at a time

How can an expert or representative do a good interview?

- Prepare in advance, making sure you understand the target audience's needs, know the points you want to get across and have key information ready
- Find out about broad question areas and define the interview parameters in advance (so you are not asked about things that fall outside your area of expertise)
- Dress right for the situation for any filmed interviews (eg smart attire for studio interviews or work clothes for interviews from the field)
- Be honest and confident in your answers
- Never promise anything you cannot deliver
- Avoid using jargon or technical terms that the audience might not understand
- Do not focus on promoting your organisation
- If necessary, make any corrections or clarifications as soon as possible
- Make sure the interviewer receives all of the information they need

Common challenge: Misinformation and disinformation in disaster risk communication – Practical Tips

Advances in technology are propelling the spread of false information at unprecedented speed and scale.

- **Rumour** is unverified information
- **Misinformation** is incorrect or misleading information spread without meaning to deceive, which is often shared by people who believe it is true
- **Disinformation** is deliberately false information that is shared to deceive or cause harm

Misinformation and disinformation in disaster risk communication can significantly increase disaster risk by causing confusion and eroding credibility and trust in disaster risk management practices and disaster responses.

For example, misinformation about the severity and timing of natural hazards can lead to delayed evacuations and inadequate preparations – or alternatively heightened stress and fear through unnecessarily alarmist content. Inaccurate reports about evacuation routes and shelter locations can lead to dangerous decisions around relocation. Misleading information about the extent of damage or aid availability can also hamper disaster recovery efforts.

Recommendations for managing mis- and disinformation include:

- Know what fuels rumours among certain groups and seek to address it. Information voids are often filled with any explanation to hand. This can be especially true on issues people feel strongly about and at times of crisis. Further, emotion, not logic, often drives reactions to information.
- Anticipate what could go wrong and use rapid, regular and transparent communication through trusted channels to fill information voids. Communicate what you know, what you don't know, and acknowledge people's emotions.
- Listen out for unverified, false or misleading information that may be circulating. It is crucial to stay informed about rumours that are causing harm. Coordinate with others to monitor rumours and keep an eye on platforms that could spread wrong information.
- Respond carefully – sometimes you have to counter incorrect information but at other times that may fuel a rumour that would fade without attention.

Pretesting your content

It is important to pre-test your disaster risk communication plans or content with your target audience whenever possible and relevant. This will help to gauge whether content is understandable, trusted and engaging for audiences, and enable you to make any necessary adjustments.

Pretesting does not need to be expensive. Once you have produced the content, whether that is key points for an interview, messages for early warning announcements, or the script for a radio drama, share it with audience members to get their views.

Key areas to get feedback on for content prepared in advance include the target audience's view on scripts, storylines, characters, presenters, logo, theme tune and other production elements, that can help to enhance engagement and coherence. Pre-testing can identify areas of low engagement, or confusion, or potentially culturally insensitive content, which can be addressed before the programme is broadcast. This can help produce content that can better resonate and align with your audiences' preferences.

Pre-testing element	Sample questions
Engagement	• What made you want to watch/listen to this content? • What put you off? What did you not like?
Comprehension	• Was the content easy to understand? • Was anything hard to understand/confusing?
Acceptance	• Is there anything you find offensive or inappropriate?
Relevance	• How relevant is this content to your life? • How are the people/characters represented similar or different from you?
Motivation	• What does this content make you want to do? • How likely are you to do that? Why?
Improvement	• What new information did you learn? • What information do you think is missing? • What do you need to know more about?

Table adapted from the Compass How-to Guide (Salazar, 2008)

Involve people with disabilities in designing and testing media content

Disasters have a disproportionate impact on people with disabilities, yet a recent UNDRR survey highlights limited progress in disability inclusion over the past 10 years.[12]

Over half of survey participants (56%) reported not being aware of, or not having access to, disaster risk information in accessible formats.

You can make your disaster risk communication inclusive of people with disabilities – and other minority or overlooked groups – by including them in your content design and testing processes.

The importance of feedback loops

Disaster risk communication is not a process that ends once the content is published or broadcast. A feedback loop involves asking your audience for their views on your disaster risk communication and acting upon their responses. This is a continuous process of ongoing dialogue with the audience, and using their inputs to improve and refine your content. Feedback loops can be used during project cycles or through longer crises that require regular content testing and adjustments as perceptions shift overtime.

Steps to set up a feedback loop

1. Discuss with the target audience group how they would like to comment, emphasising what adjustments can and cannot be made to your content. Programme managers must be willing and able to implement recommended changes where possible.
2. Set up a feedback loop using inclusive channels. These might include phonelines, focus groups, individual or group interviews, social media interactions, polls and/or suggestion boxes.
3. Communicate to your audience how they can have their say, and what elements of the content can and cannot be adjusted.
4. Use this audience input to make informed adjustments to your talking points, channels and communication plans.
5. Thank your audience for their input and tell them how this has led to improvements.

Examples of feedback loops:

- Conducting focus groups with members of a target audience to understand their perceptions of current warnings and gather suggestions for improvement
- Using social media polls and comments to gauge audience reactions and preferences

[12]UNDRR (2023) Global Survey on Persons with Disabilities and Disasters

around communication channels and formats
- Implementing changes to warnings and their delivery methods based on input from emergency managers and the general public

Feedback loops are also an effective tool to counter misinformation and disinformation. They can highlight the beliefs, fears and rumours that can drive misinformation, which you can then address through regular, timely and proactive communication via trusted channels.

SCENARIO: DO – CREATING CONTENT FOR FISHERFOLK IN PACHA-PACHA

The workshops for practitioners are entrusted to an experienced group and are underway. The media content is taking your attention right now. Guided by media expertise, you conclude:

- A music and discussion programme for fisherfolk to listen to while out at sea would be a good way to engage them. It would cover a wide range of interests in the sector – from market prices to trends and technology (including radios) to indigenous knowledge.

- Experts in radio programming alongside specialists from the Met Service, Ministry of Fisheries, civil society, and the private sector will inform the episodes.

You plan IMPACTFUL communication: The show will be interactive **(I)** by including regular interviews and enabling social media and phone-in contributions. It will be multi-channel **(M)**, available via live broadcast, podcast, and through clips on social media. Contributions from fellow fisherfolk and their networks will personalise **(P)** the content for their needs. The content is informed by experts so it's accurate **(A)** and represents real-life experiences. You pick skilled presenters and programme makers who are clear, concise and consistent **(C)** with important information. Broadcasting daily at lunchtime will be timely **(T)** for fisherfolk to listen with less distraction. (Urgent warnings can go out any time). The tone will be fun **(F)**: Co-hosts (one old, one young) will be lively and entertaining yet practical and useful **(U)**. The hosts and the content will represent a range of groups and challenge negative social norms, leaving no one out **(L)**.

Resources: DO

News media

- USGS Cascades Volcano Observatory News Media Management Guide - General Protocols and Templates

Pre-testing

- Compass (n.d.) How to Conduct a Pre-Test

Inclusion

- UNDRR (2023) Inclusive early warning early action: checklist and implementation guide
- Web Accessibility Initiative (n.d.) Web Content Accessibility Guidelines (WCAG) 2

Information integrity

- Government of Canada (n.d.) Countering disinformation: A guidebook for public servants
- Organisation for Economic Co-operation and Development (OECD) (2024) Facts not Fakes: Tackling Disinformation, Strengthening Information Integrity
- WHO (2022) Advancing infodemic management in risk communication and community engagement in the WHO European Region: implementation guidance
- WHO/UNICEF (2023) How to build an infodemic insights report in 6 steps

IMPROVE

Top tips:

- Measure your impact
- Monitor progress against your goal and objectives (with indicators)
- Evaluate what works and share your learning widely

Measuring impact

Measuring the impact of your disaster risk communication is key to improving your content and its effectiveness.

First and foremost, measuring impact helps you to understand what works and what does not in achieving your objectives and goal. Ultimately, this can help to better protect populations.

Measuring impact also helps to optimise your resource allocation and cost-effectiveness, enabling you to direct resources towards future plans, initiatives and formats that yield the best results.

Demonstrating impact is also important in being accountable to stakeholders such as donors, partners and audience members, and helps to justify future funding.

Monitoring and indicators

Monitoring is the systematic collection and analysis of data to track the performance of your disaster risk communication over time, based on your measurable indicators. Monitoring data is vital in informing whether your goals have been achieved.

Monitoring typically takes place at regular intervals (eg, monthly or quarterly). If your project length and budget require, monitoring can be a one-off process (eg half-way through a project).
Depending on what you want to measure, you can gather data through surveys, focus groups, interviews and/or observation.

You can also use feedback loops (see page 38) to gather monitoring data, though their primary purpose is to make iterative changes to content whereas monitoring data is used to evaluate performance against objectives.

Table 1 shows example indicators that are SMART: specific, measurable, achievable, relevant and time-bound.

Table 1: Example disaster risk communication indicators

GOAL: The target population takes actions that reduce flood risks

	Objectives	**Indicator**	**Baseline** Month 1 (Target versus actual)	**Midline** Month 12 (Target versus actual)	**Endline** Month 24 (Target versus actual)	**Verification method**
Project can demonstrate that the changes it has brought about have helped people to make better risk-informed decisions	Knowledge	% of listeners report understanding risk information provided				Quantitative evaluation (baseline/midline/endline)
	Risk Perception	% of listeners are confident in their ability to to take action to reduce flood risk				
	Attitudes	% of listeners who believe there is a real risk of flooding				
	Decision making	% of listeners who report that the communication helps them to make better weather-related and risk-informed decisions				
	Practice/ behaviour	% of listeners who report taking a recommended action to prepare for heavy rainfall				

Evaluation

An evaluation is an essential way to use monitoring data to measure whether your disaster risk communication has met its overall objectives and goal, usually at the end of your initiative.

An evaluation can also inform learning and improvement such as your project's strengths, weaknesses and best practices, ensuring stakeholder transparency and accountability and continuous improvement in your future disaster risk communication and that of others.

Did the project meet its objectives?

The following research questions can be adapted for different communication projects.

- **Reach:** How many people/what proportion of the target audience did the content reach? Who was not reached and why?
- **Understand:** Did people understand the content in the way it was intended?
- **Relevance:** Was the content relevant, timely and useful?
- **Engagement:** Did people want to watch/read/listen to the content? Did they tune in/follow regularly? Why or why not?
- **Trust:** Did people trust the content? Why or why not?
- **Effectiveness and impact:** Was the content effective?

This will depend on your objectives, but might include:

- Did the content help people **feel better informed?** Did it help people understand key risk information, including weather forecasts?
- Did it **increase their knowledge?** What did people learn about how to prepare for a hazard?
- Did it strengthen people's **perception** that there is a real risk?
- Did it lead to **discussion** about the risk? Did people share information from the content with others?
- Did people **take preparatory action** as a result of the content?
- Did the content have any **unintended impacts** at the individual or population group level?

Evaluations can use various quantitative and/or qualitative research methods. Choose a research method that can best answer your research question, and measure progress against your indicators. Also consider the time you have to conduct and analyse the research, your budget, and the complexity of the research (who has the expertise/skills to conduct it – a research agency, an academic or a researcher).

It is useful to look at the existing literature in your country and context to understand what evidence already exists on disaster risk communication. Seeing how other researchers have framed research questions and survey questions, and their findings and learnings might help shape your evaluation. In turn, it is good practice to share your evaluation results and analysis to help guide others.

Quantitative research

Randomised controlled trials (RCTs) are studies that measure the effectiveness of a new intervention or treatment. Participants are randomly assigned to a control group (no treatment) and a treatment group (that can be exposed to the media content). Both groups can then be interviewed to measure differences in outcomes.

While no single study can definitively prove causality, randomization reduces bias and offers a rigorous method for examining cause-and-effect relationships between an intervention and its outcome.

Quantitative surveys are the best way to learn what proportion of your target audience was reached by your content. A survey of a representative sample population also allows you to compare the reactions of people who were reached by the content (exposed) and those who were not (unexposed). Statistical techniques such as multiple regression can control for other influences of (measured) third variables such as demographic characteristics, and support more robust association claims between exposure and change in outcomes. You can also disaggregate data from a large sample by sex, age, ethnicity or any other relevant category. You might discover that different groups have very different understandings of the information and prefer different media.

Baseline, midline and/or endline surveys: These quantitative methods can help you to compare your results (eg audience understanding) over time.

Longitudinal designs: include the repeated measurement of outcomes with the same individuals to assess changes over time.

Qualitative research

Qualitative, In-depth interviews and focus group discussions are useful for getting detailed perspectives from your target audiences. This can provide you with rich data on what audiences think of the content, what engaged them, what they recalled and learned and what encouraged action. This can help complement the quantitative data findings.

Qualitative Key Informant interviews can provide expertise in a certain field or topic of interest and provide deeper understanding of the effectiveness of your media and communication content. They can also provide an in-depth understanding of the community and the issues that people face that can give useful insight into the effectiveness of the content.

There are different qualitative impact evaluation methodologies that can be considered such as; process tracing, contribution analysis and Qualitative Impact Protocol (QuIP).

The above research methods can be done in partnership with an academic institution, research agency, or researchers with experience in these areas.

Ethical considerations when conducting research

- Do no harm: Prioritise the safety of both researchers and participants. Do not go ahead with research if anyone risks being harmed for participating.
- Collaborate with others: To avoid over-surveying crisis-affected populations, consider partnering with other organisations or adding your questions to existing research studies.
- Be prepared: Think about what is available in the affected area and what you will need to bring with you to avoid being a drain on limited resources. If possible, bring a list of services that you can tell participants about if they are in need.

SCENARIO: IMPROVE – LEARNING WHAT WORKS IN PACHA-PACHA

At various points during your time on-air, you conducted research among fisherfolk to understand your reach, relevance, engagement, trust, and impact.

You measure if people felt better informed about the issues you listed for your talking points, including how to receive early warnings and stay safe, and whether they took any actions as a result.

You saw marked progress against most of your objectives, but less so on some. You reflect on why this might be and you share it with the stakeholders to improve a new round of communication.

Resources: IMPROVE

- BBC Media Action (n.d.) Summary of BBC Media Action's research questions and criteria used in crisis
- Further reading: BetterEvaluation, Hariton E, Locascio JJ. Randomised controlled trials
- Further reading: Better Evaluation, About QuIP - Bath SDR
- International Organisation Development Ltd (2029) DFID ethical guidance for research, evaluation and monitoring activities
- OECD (n.d.) Evaluation Criteria

TO BE CONTINUED

Top tip:

- Communication is a process. Continue understanding, planning, doing and improving to advance disaster risk communication across society, over time.

At this point, you have concluded all four stages: Understand, Plan, Do, Improve.

But communication is a process and it doesn't end there.

Building on learning you gained throughout the process, circle back to understand more and continue to advance your risk communication plans.

We hope this guide helps you achieve excellence in your risk communication to reduce disaster risk, save lives, and build resilience.