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# UR Himeji+

UNDERSTANDING RISK  
GLOBAL FORUM 2024

TRADITION • INNOVATION • RESILIENCE

## Unifying Partners to ensure warnings save lives



Risk-informed  
Early Action  
Partnership



Met Office

# An introduction to The Risk-informed Early Action Partnership (REAP)



Target 1

**Integrated laws,  
policies and plans**



Target 2

**Financing and delivery  
mechanisms**



Target 3

**Early warning systems  
infrastructure and  
institutions**



Target 4

**New or improved early  
warning systems that  
prompt informed action**

NOW PLAYING

# UP - Unifying Partners...

...old and new to ensure warnings save lives



Hosted by REAP - the Risk Informed Early Action Partnership  
Supported by the Met Office, UK

**Dug - tradition**



**Russell - innovation**



**Carl - resilience**



- **WHAT - How do we make the science useful?**
- **WHO - How do we get people onboard?**
- **WHERE - How do we deliver in the most challenging places?**
- **MONEY - How do we get the financial resources to where they are the most needed?**





# Early Warnings for All

Pillar 1



led by



Pillar 2



led by



Pillar 3



led by



Pillar 4



led by



Asia Pacific

- EW4All Multistakeholder Forum
- Philippines, 17-18 Oct. 2024

Africa

- EW4All Multistakeholder Forum
- Namibia, 21-22 Oct. 2024

Arab States

- EW4All Multistakeholder Forum
- Kuwait, 28-31 Oct. 2024

Europe

- EW4All Multistakeholder Forum
- Montenegro, 6-8 Nov.

Global

- Global Platform for DRR / MSF
- Geneva, 2-3 June 2025

*Protect everyone everywhere by 2027*

**Inter-Pillar**



1. **GOVERNANCE**, policy & legislation
2. Stakeholder coordination & **PARTNERSHIPS**
3. Advocacy & awareness
4. Planning & **FINANCE**
5. **MONITORING** & evaluation

**Pillar 1**



**Disaster risk knowledge**

Systematically collect data and undertake risk assessments

- Are the hazards and the vulnerabilities well known by the communities?
- What are the patterns and trends in these factors?
- Are risk maps and data widely available?

**Pillar 2**



**Detection, observations, monitoring, analysis and forecasting of hazards**

Develop hazard monitoring and early warning services

- Are the right parameters being monitored?
- Is there a sound scientific basis for making forecasts?
- Can accurate and timely warnings be generated?

**Pillar 4**



**Preparedness and response capabilities**

Build national and community response capabilities

- Are response plans up to date and tested?
- Are local capacities and knowledge made use of?
- Are people prepared and ready to react to warnings?

**Pillar 3**



**Warning dissemination and communication**

Communicate risk information and early warnings

- Do warnings reach all of those at risk?
- Are the risks and warnings understood?
- Is the warning information clear and usable?



# **UP!**

## **Unifying Partners old and new to ensure warnings save lives**

**9.00am-10:45am** **SESSION 1: Understanding forecast uncertainty**

**11.00am-12.30pm** **SESSION 2: Who are the people at the centre of EWS - using tradition and innovation to build resilience.**

**LUNCH**

**1.30pm-2.30pm** **SESSION 3: Early Warning and Early Action in Conflict research and applications**

**2.45pm-5.30pm** **SESSION 4: Innovative Finance to scale up early warning and early action.**

4.1. Exploring Alternatives to Traditional Trigger-Based Funding Mechanisms

4.2. Financing Innovation across a People-centered Resilience Agenda

4.3. Where do we go from here? 2030 gaps and opportunities.

# THE ROLES OF STATE AND NON-STATE ACTORS IN EARLY WARNING AND EARLY ACTION

CAPACITY GAPS AND COLLABORATION

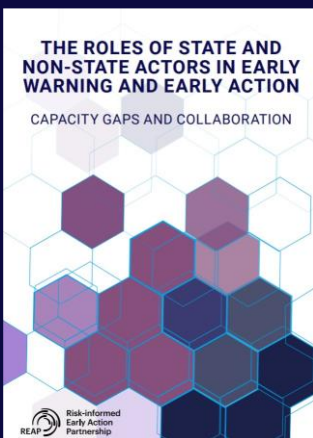
*New REAP report!*

**The Roles of State and Non-  
State Actors in Early Warning  
and Early Action.**



New REAP report!

### The Roles of State and Non-State Actors in Early Warning and Early Action.



This new REAP report underscores the crucial role of non-state actors in early warning and early action for effective disaster risk reduction. It provides an overview of state and non-state actors and presents eight essential recommendations for international organisations, national governments, and the wide range of actors engaged in building and delivering EWS.

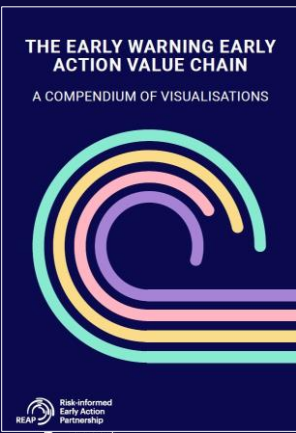
Access the report via this QR code:



Launch of new REAP paper for consultation:

### The early warning early action value chain: A compendium of visualisations.

The report presents 10 distinct visualisations selected for their contribution to overall thinking in the sector and representativity of specific communities of practice. The authors of the paper are now seeking wider feedback on this paper before 30 June 2024.



Access the report via this QR code:



### The future of REAP: Your insights about early warning and early action are needed!

We want to hear from our Risk -informed Early Action Partnership (REAP) partners and stakeholders on what our post -2025 future should look like.

The survey consists of just three questions:

- 1 What role do you think REAP could play after 2025 - or have we already succeeded in our mission?
- 2 What do you think are the biggest challenges facing early warning and early action in the coming decade that a partnership like REAP could address?
- 3 Is there anything else you'd like to share to help REAP in thinking about its future direction?



<https://bit.ly/reak2025survey>

You can submit your responses via text, video or audio.

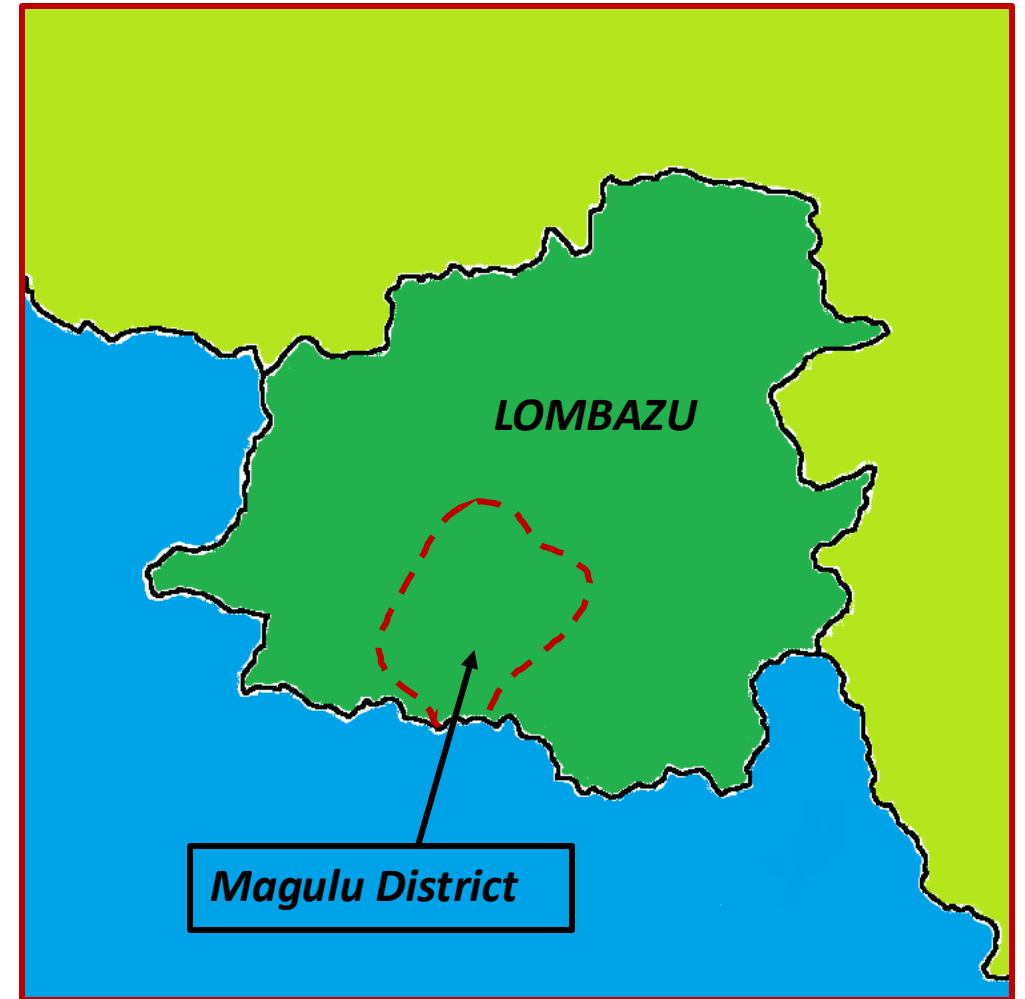




# Welcome to the district of Magulu, in Lombazo

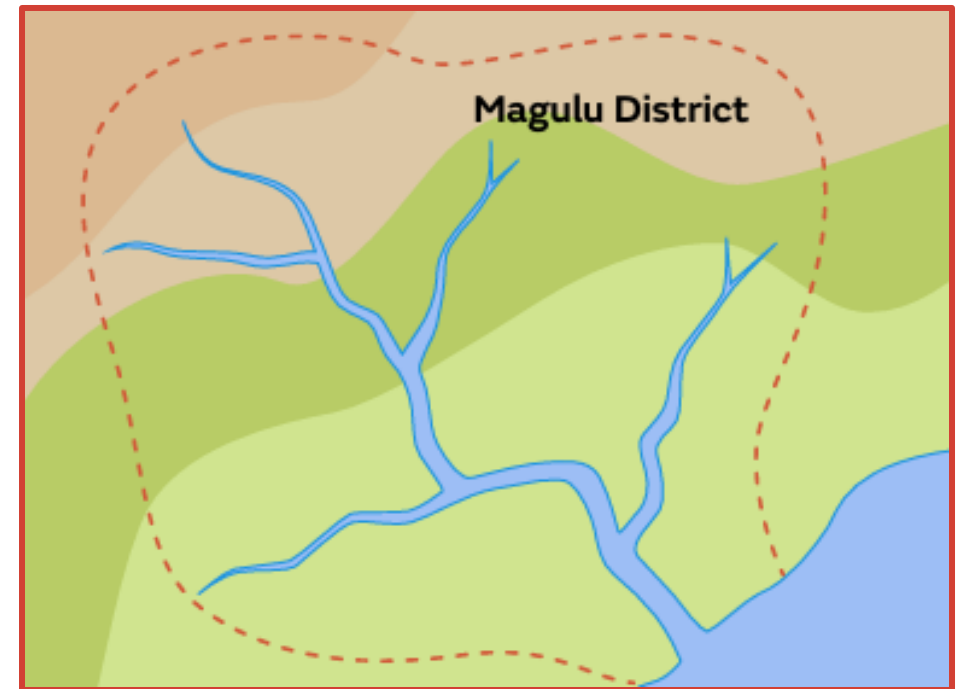
# Introduction to Lombazu

- Lombazu is a LDC located in a subtropical, monsoon climate region.
- The population of Lombazu is ~1.2million, with >70% of the population considered vulnerable, living on less than \$2 per day.
- Politically Lombazu is a fragile state, current satisfaction with the current government is low, and tensions are high.



# Magalu Overview

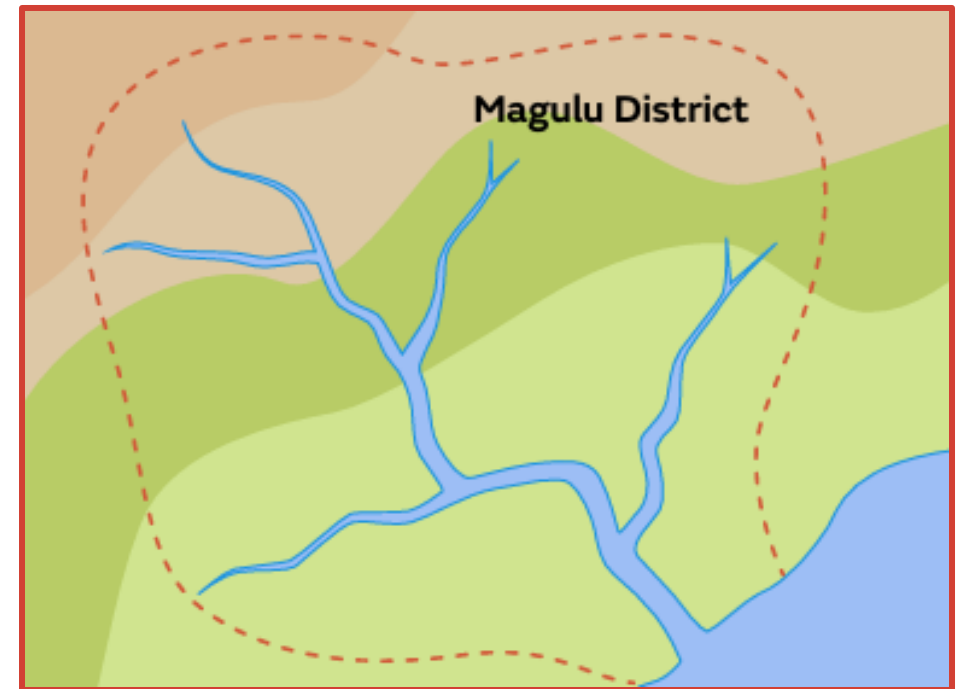
- Magalu is a fertile district in the south of Lombazu, covering the most important river basin (water source) in the country, the Tala River.
- The population of Magalu is ~182,000 but has risen in recent years with internal migration (displaced people) from neighbouring districts.
- The main livelihoods are agriculture (corn and rice production), livestock, fishing (river and trawling) and small businesses.





# Magalu Overview

- Magalu has 2 large IDP camps, located in the north-east made up of people displaced by previous flooding and coastal inundation in the south of the region, and neighbouring districts.
- The district capital is Magalu Town.



# Media & Communication Ecosystem: Magulu

What is the <b>operating environment</b> for media?	What media <b>exists</b> ?	What media and communication is <b>used and preferred</b> ?
<ul style="list-style-type: none"> <li>• <b>Regulation</b> - There appears to be media freedom, but self-censorship is common.</li> <li>• <b>Economic</b> - State-owned media is moderately well-funded. Small private media actors scarcely make ends meet through paid-for programming and advertising.</li> <li>• <b>Professional capacity</b> – Editors and programme-makers understand their audience interests and needs, but only have basic skills and knowledge.</li> <li>• <b>Infrastructure</b> - Radio towers are often damaged by flooding. Cell towers tend to fare better due to private funding.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Platforms</b> - TV, radio, digital platforms, and mobile phone networks</li> <li>• <b>Content</b> – Most media content is either news and current affairs or music and light entertainment.</li> </ul> <p>Most content is from the capital of Lombazu, reflecting majority interests.</p> <p>Indigenous and minority representation and interests tend to be absent or misrepresented.</p>	<p><b>Middle-income</b></p> <ul style="list-style-type: none"> <li>• Men prefer TV and digital platforms on their phones. They share information in cafes and farm shops.</li> <li>• Women use radio during chores. Some are allowed mobiles. They share information in beauty shops.</li> </ul> <p><b>Low-income</b></p> <ul style="list-style-type: none"> <li>• Men and women use radio. Men have mobiles but leave them at home when they go out to work for safe-keeping.</li> <li>• They share information on market days and with peers doing day labour</li> </ul> <p><b>Displaced groups</b></p> <ul style="list-style-type: none"> <li>• Most (but not all) have access to radio and prefer entertainment for distraction. Leaders have mobiles, but most others don't. They share information in camp-organised groups.</li> </ul>





# Magulu



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# Session 1: Understanding Forecast Uncertainty

*What do you do when the \*\*\*\* hits the fan?*

Speakers:

Nyree Pinder

Helen Caughey



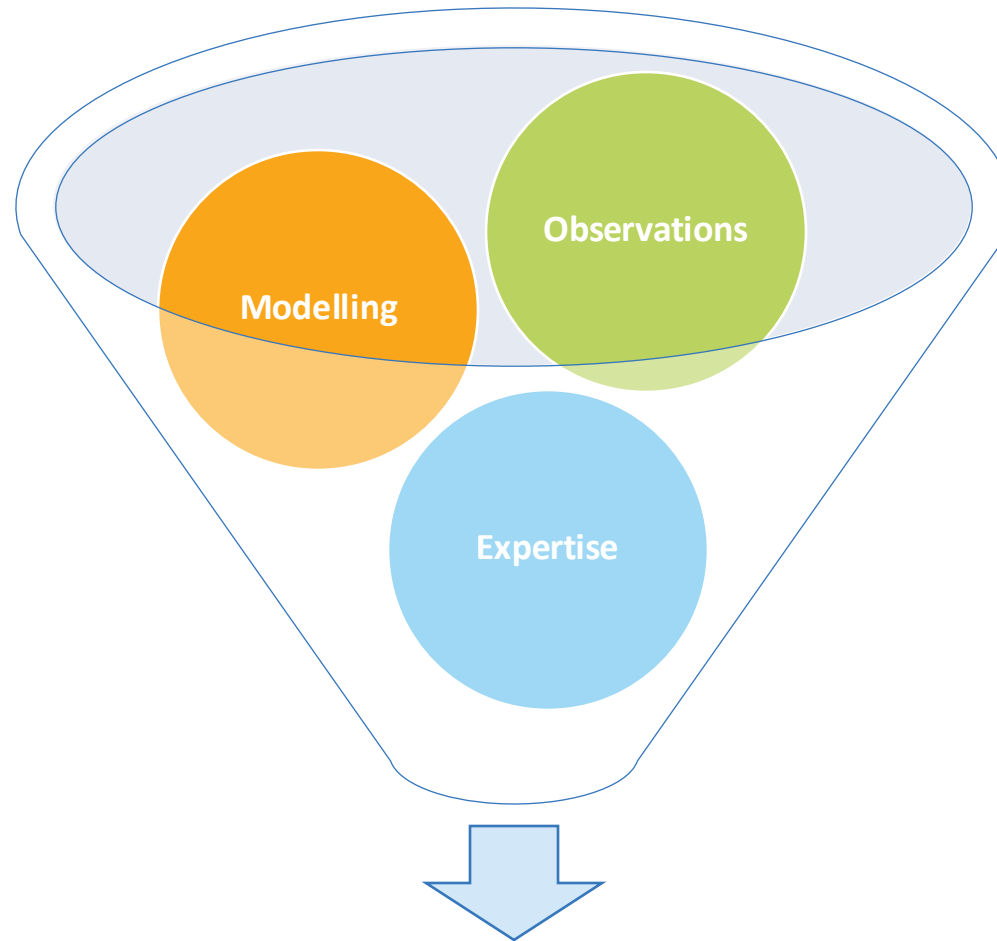


# Session Aims

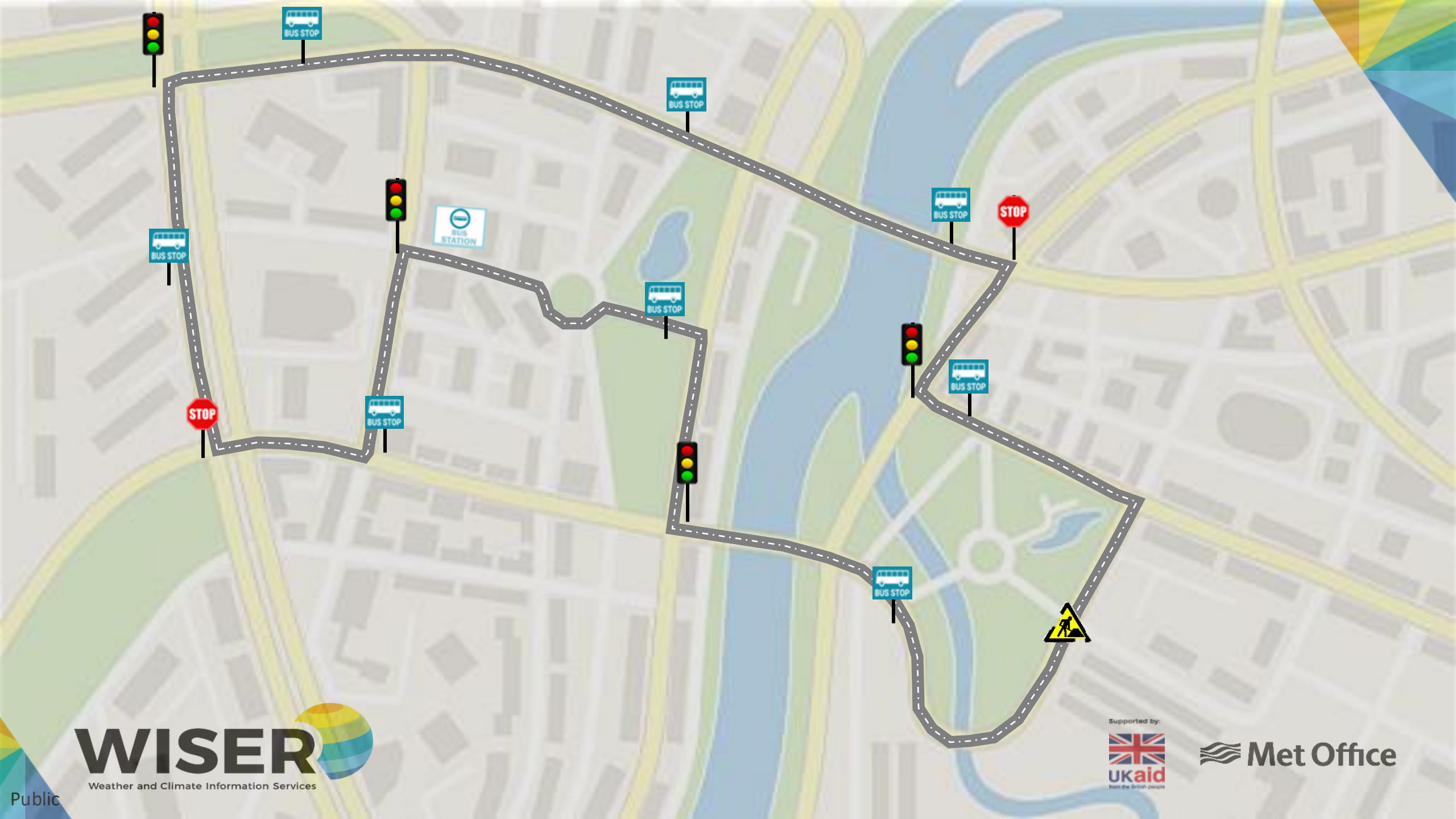
*This session will explore...*

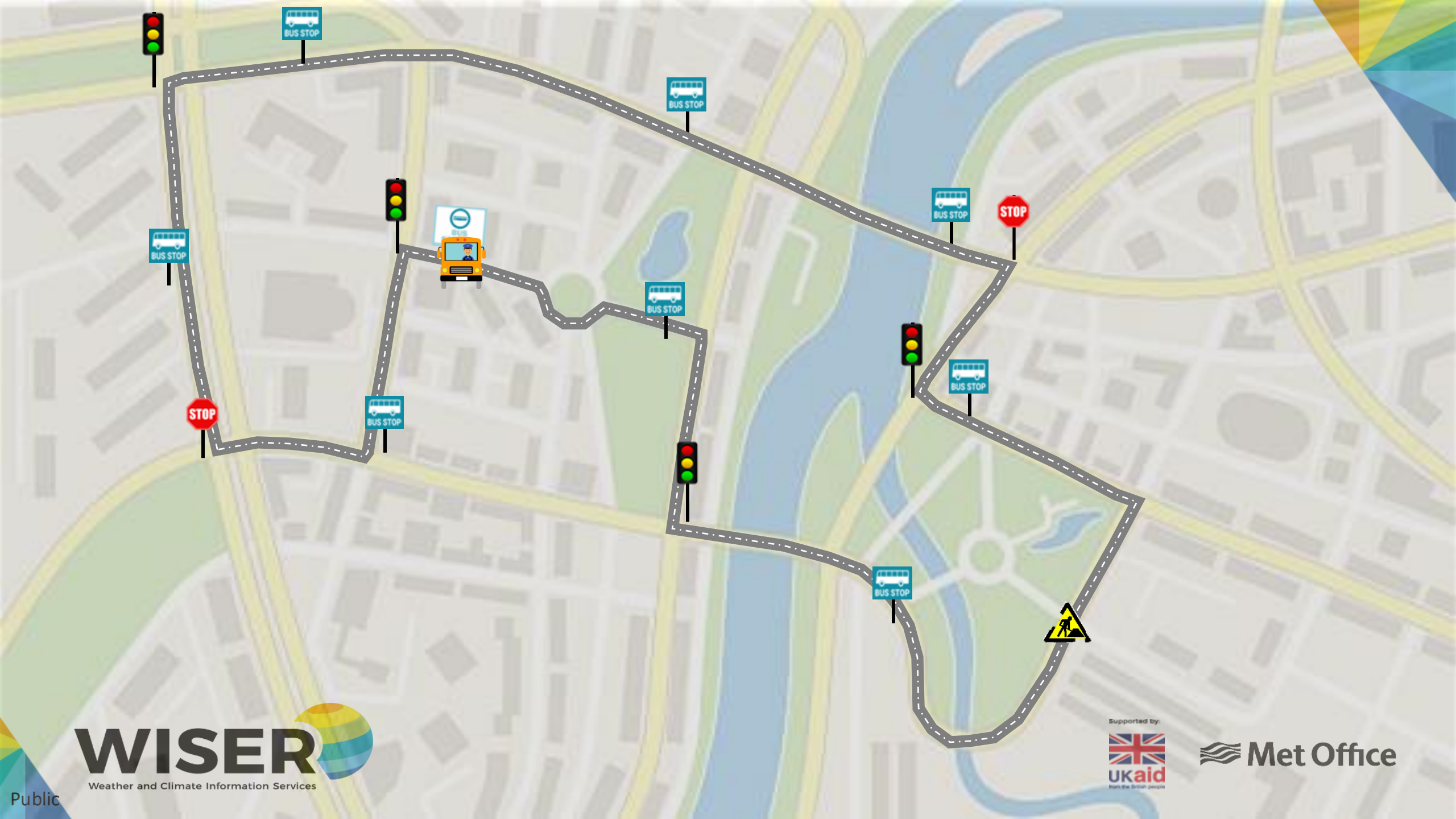
- ...sources of uncertainty in forecasts
- ...how forecasters try to quantify the uncertainty
- ...the role of uncertainty in the communication of forecasts
- ...what anticipatory actions users may take in response to forecasts (understanding the lead times which these actions require)
- ...how co-production can help improve mitigation and preparedness through a move toward action-led forecasts and warnings

# Putting a forecast together...



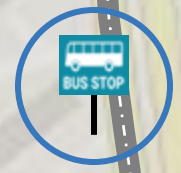
**Forecast**





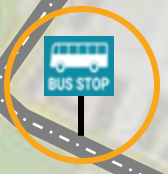


Short Range  
(up to ~48-72 hrs)



Nowcasting  
(<6 hrs)

Medium/Longer Range  
(beyond ~3 to 5 days)



# How do we take account of the uncertainty?



# Let's try some forecasting...





# Will there be a tropical cyclone?





# Action-led Forecasting

## Threshold

What the weather will be



## Impact

What the weather will do



## Action

What needs to be done to mitigate the weather

# National severe weather warning: wave 32

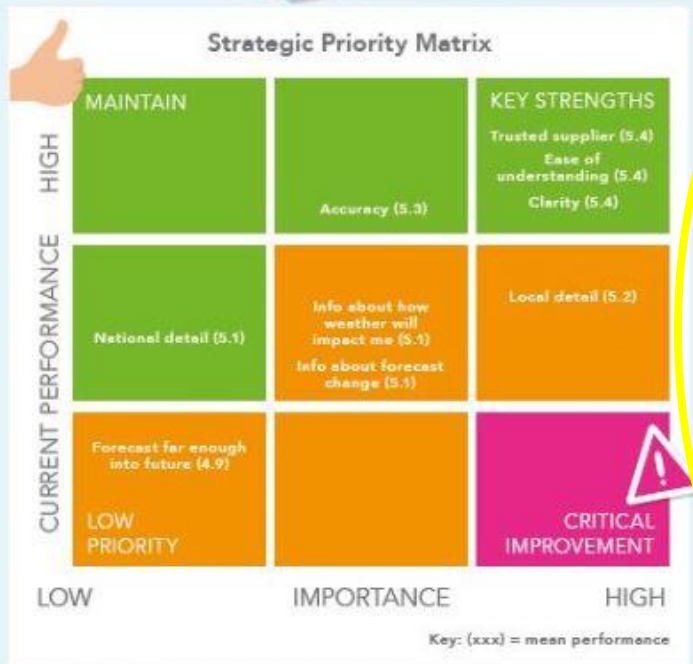
A severe weather warning was issued on Thursday 13th February for rain in your area from 3pm on Saturday 15th until 3pm on Sunday 16th February 2020.



86% aware



58% acted

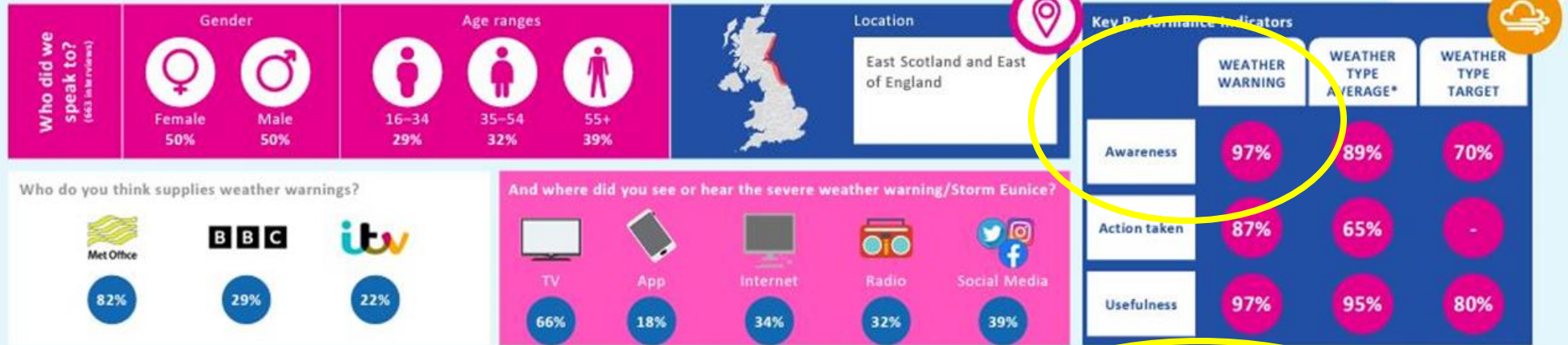


Storm Dennis

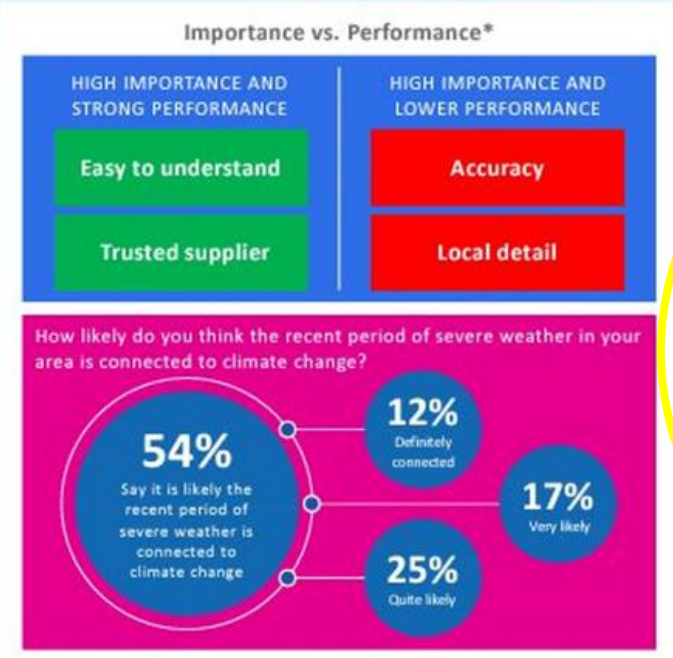
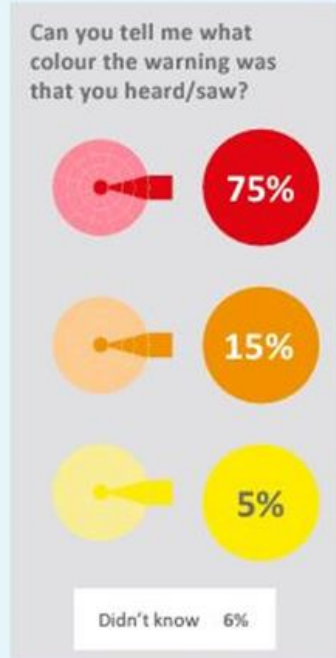


# National severe weather warning: wave 40 – red area

A severe weather warning was issued on Friday 26<sup>th</sup> November for wind associated with Storm Arwen between 15:00 on Friday 26<sup>th</sup> and 02:00 on Saturday 27<sup>th</sup> November



97% aware



87% acted

Storm Arwen (Red)

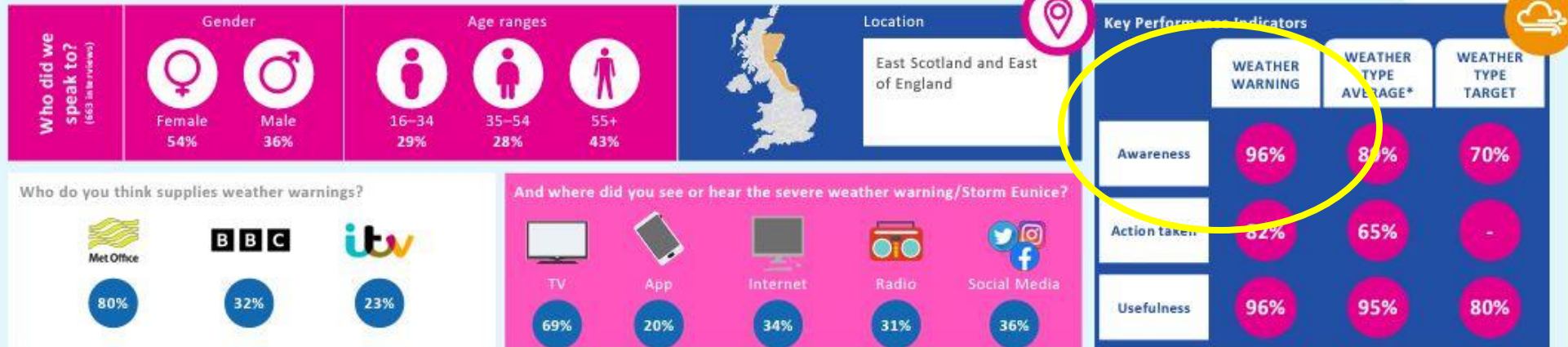
\*Importance vs. performance across red and amber warnings for Storm Arwen



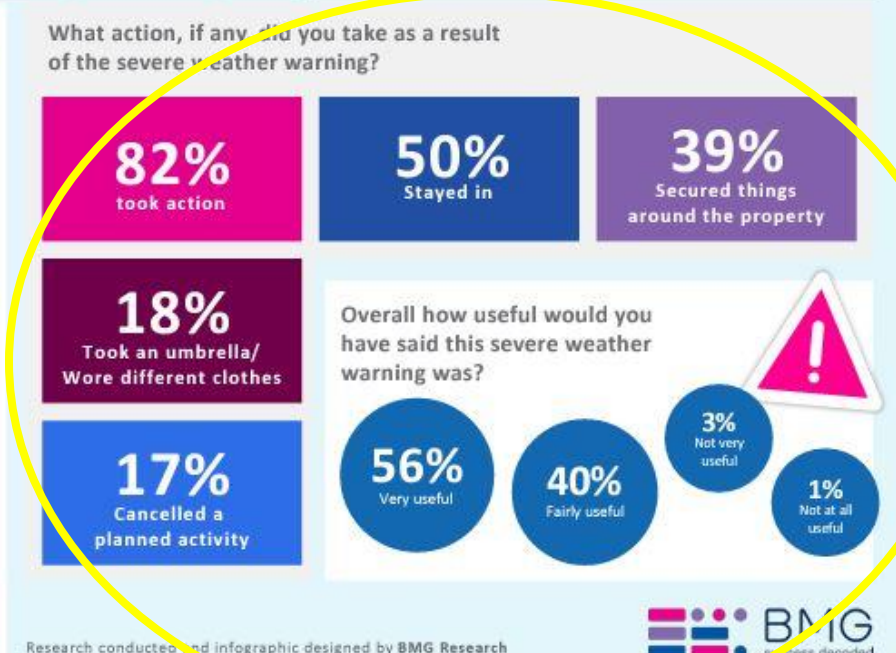
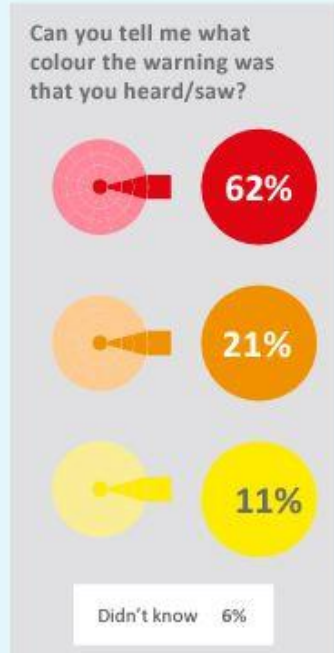
# National severe weather warning: wave 40 – amber area



A severe weather warning was issued on Thursday 25<sup>th</sup> November for wind associated with Storm Arwen between 15:00 on Friday 26<sup>th</sup> and 09:00 on Saturday 27<sup>th</sup> November



96% aware



82% acted

Storm Arwen (Amber)

\*Importance vs. performance across red and amber warnings for Storm Arwen



# What are impact-based forecasts & warnings?



WARNING TYPE	EXAMPLE
Phenomenon-based warning	<u>Rainfall accumulations</u> of 150mm expected within 18 hours in [local Govt. region] tomorrow.
Impact-based warning	Rainfall accumulation of 50mm expected within 18 hours in [city] tomorrow, <u>which may result in road closures</u> due to flooding.
Impact warning	Expect <u>traffic to be delayed</u> tomorrow at rush hour in [city] due to road closures from flooding, caused by heavy rainfall.
Call-to-Action warning	<u>Reconsider your commute home</u> tomorrow evening in [city], as it is likely that traffic will be delayed due to flooding of roads, caused by heavy rainfall.

# Impact Matrix

Likelihood of impacts occurring

Likelihood	High				
	Medium				
	Low				
	Very low				
		Very low	Low	Medium	High
Impact					

Level of impacts expected

# Forecast Based Early Action (FBEA)


The goal of FBEA is to anticipate disasters, prevent, or at least significantly lessen, their impact, if possible, reducing human suffering and loss.

A **pre-agreed set of early actions** that will be implemented at the time of a **triggering forecast**.

The roles and responsibilities of everyone involved in implementing actions should be clearly defined.

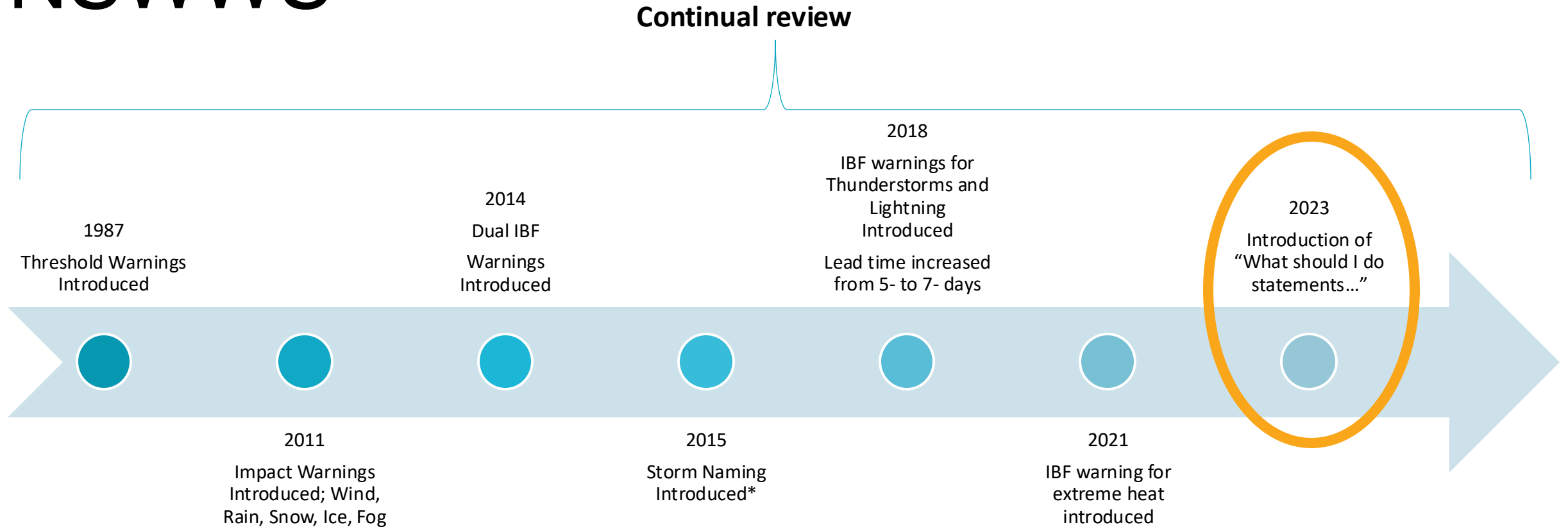
Full commitment towards implementation of mitigations amongst involved stakeholders.

# Triggering Action Plans

<p><b>Medium / Significant Impacts</b></p>  <p>FLOOD WARNING</p>	<table border="1"> <tr> <td rowspan="4">Likelihood</td> <td>High</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Medium</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Low</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>Very Low</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td></td> <td>FGS</td> <td>Minimal</td> <td>Minor</td> <td>Significant</td> <td>Severe</td> </tr> <tr> <td></td> <td>NSWWS</td> <td>Very Low</td> <td>Low</td> <td>Medium</td> <td>High</td> </tr> </table> <p>Potential Impacts</p> <ul style="list-style-type: none"> <li>Flood Warnings Issued</li> <li>Medium / Significant Impacts reported</li> <li>Level-3 Heat-Health Watch or Cold Weather Alerts</li> </ul>	Likelihood	High			✓		Medium			✓		Low			✓		Very Low			✓			FGS	Minimal	Minor	Significant	Severe		NSWWS	Very Low	Low	Medium	High	<ul style="list-style-type: none"> <li>Injuries with danger to life</li> <li>Disruption to day-to-day routines and activities.</li> <li>Short-term strain on emergency responder organisations.</li> <li>Transport routes and travel services affected. Longer journey times expected. Some vehicles and passengers stranded.</li> <li>Disruption to some utilities, infrastructure, and services.</li> <li>Damage to buildings, property, and structures.</li> <li>Some rural communities temporarily inaccessible due to deep snow or snow drifts or affected by flooding.</li> <li>Small-scale evacuation of properties may be required.</li> </ul>	<ul style="list-style-type: none"> <li><b>Trigger</b> a TAG Teleconference for Medium Impact Snow and Ice Warnings. *</li> <li><b>Trigger</b> a TAG Teleconference where likelihood for <u>any</u> warning is Medium/High/Level 3 Heat Health or Cold Weather Alert</li> <li><b>Consider</b> the TAG Teleconference where likelihood is Low/Very Low</li> <li><b>Consider</b> the requirement for an TCG/SCG and MAIC</li> <li>Warn and inform the public appropriately</li> <li><b>Consider</b> Ramping up and rostering resources</li> <li><b>Consider</b> voluntary sector support</li> </ul>
	Likelihood		High			✓																														
Medium					✓																															
Low					✓																															
Very Low				✓																																
	FGS	Minimal	Minor	Significant	Severe																															
	NSWWS	Very Low	Low	Medium	High																															

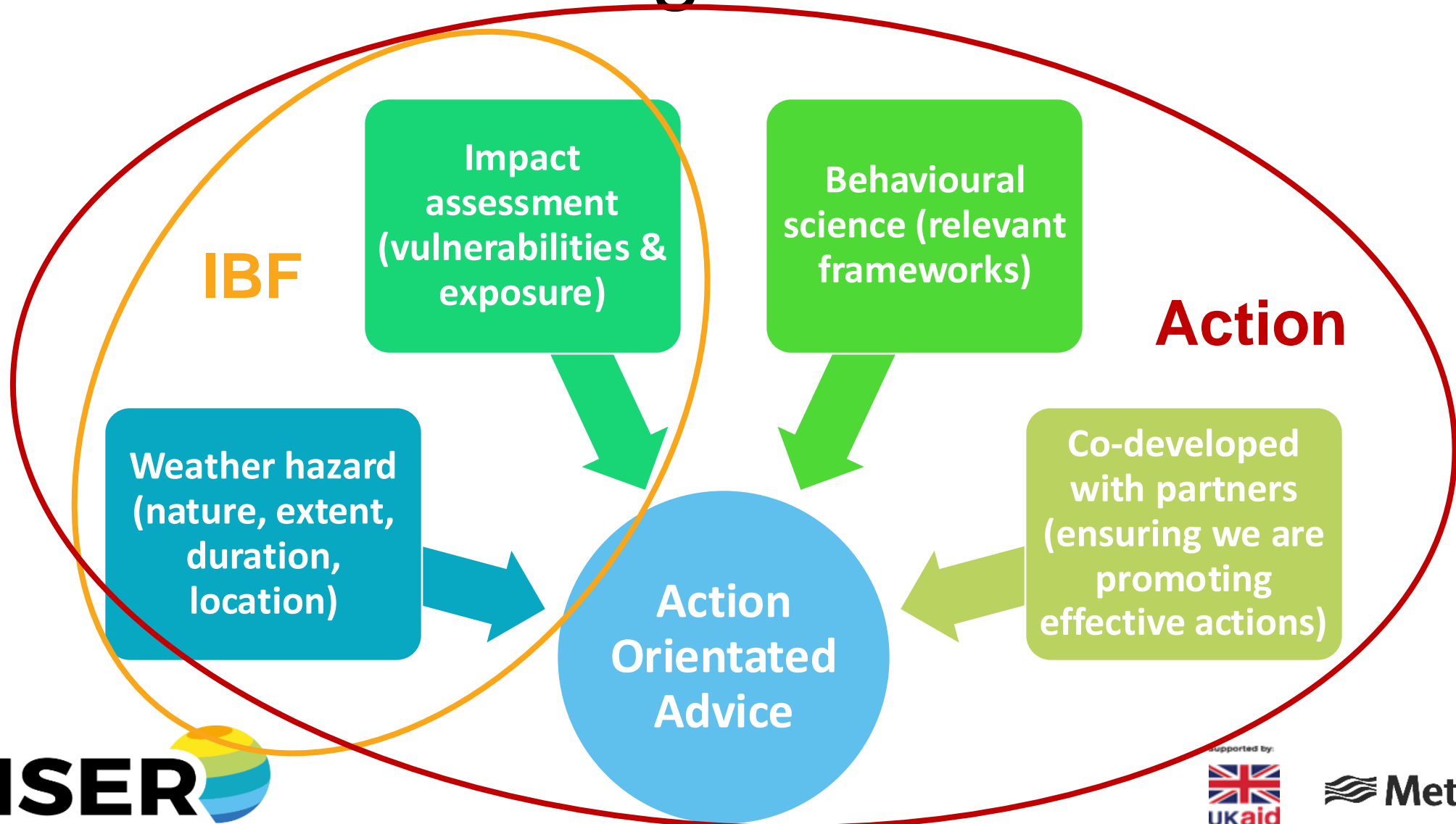


# Timeline of Key Developments to NSWWS

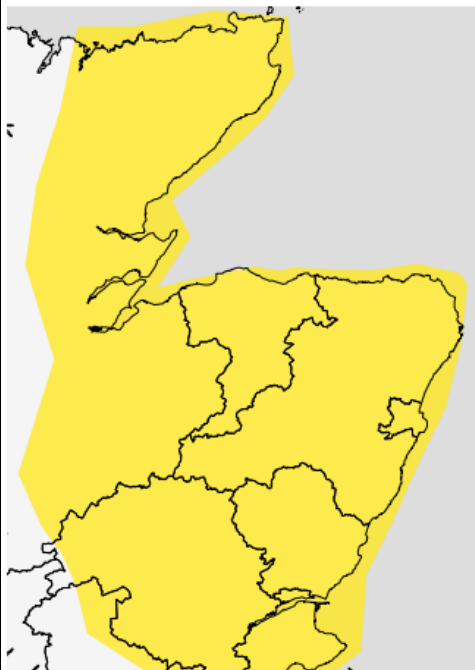


\*Not directly a development of the NSWWS service but used effectively in conjunction to increase awareness amongst the public.

# Action-Led Warnings



# Encouraging action...



**Rain and snow has the potential to cause disruption in places, mainly to travel, with snow focused over high ground.**

What to expect

- There is a slight chance that some rural communities could become cut off
- There is a small chance that power cuts will occur and other services, such as mobile phone coverage, could be affected
- There is a small chance of travel delays on roads, some stranded vehicles and passengers, along with delayed or cancelled rail and air travel
- Spray and flooding could lead to difficult driving conditions and some road closures
- Where flooding occurs, there is a slight chance of delays or cancellations to train and bus services



**Yellow warning**  
**Rain & Snow**

Between  
**00:00 Tue 26 Mar 2024** and  
**12:00 Tue 26 Mar 2024**

**Further Details** (continued)

**What should I do?**

Give yourself the best chance of avoiding delays by checking road conditions if driving, or bus and train timetables, amending your travel plans if necessary.

Snowy, wintry weather can cause delays and make driving conditions dangerous, so to keep yourself and others safe: plan your route, checking for delays and road closures, amending your travel plans if necessary; if driving, leave more time to prepare and check your car before setting off; make sure you have essentials packed in your car in the event of any delays (warm clothing, food, water, a blanket, a torch, ice scraper/de-icer, a warning triangle, high visibility vest and an in-car phone charger).

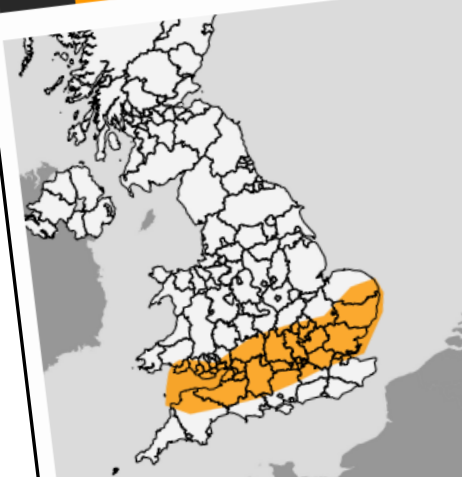
People cope better when they have prepared in advance for the risk of power cuts or being cut off from services and amenities due to the snow. It's easy to do; consider gathering torches and batteries, a mobile phone power pack and other essential items.

Be prepared for weather warnings to change quickly: when a weather warning is issued, the Met Office recommends staying up to date with the weather forecast in your area.

# Encouraging action...

**Amber warning**  
**Wind**

Between  
**10:00 Tue 2 Jan 2024** and  
**20:00 Tue 2 Jan 2024**



**Storm Henk will bring a spell of very strong winds, causing disruption to travel and utilities.**

**What to expect**

- Longer journey times and cancellations likely, as road, rail, air and ferry services may be affected
- Some roads and bridges likely to close
- Probably some damage to buildings, such as tiles blown from roofs
- Flying debris is likely and could lead to injuries or danger to life
- There is a good chance that power cuts may occur, with the potential to affect other services, such as mobile phone coverage
- Injuries and danger to life is likely from large waves and beach material being thrown onto coastal roads, sea fronts and properties

If you must drive, you can do this more safely by taking the following actions; drive slowly to minimise the impact of wind gusts, be aware of high sided vehicles/caravans on more exposed roads and be cautious when overtaking, and give cyclists, motorcyclists, lorries and buses more room than usual.

Being outside in high winds makes you more vulnerable to injury. Stay indoors as much as possible. If you do go out, try not to walk, or shelter, close to buildings and trees. In advance of high winds, check for loose items outside your home and secure them. Items include; bins, garden furniture, trampolines, tents, sheds and fences.

If you are on the coast, stay safe during stormy weather by being aware of large waves. Even from the shore large breaking waves can sweep you off your feet and out to sea. Take care if walking near cliffs; know your route and keep dogs on a lead. In an emergency, call 999 and ask for the Coastguard.

People cope better with power cuts when they have prepared for them in advance. It's easy to do; consider gathering torches and batteries, a mobile phone power pack and other essential items.

Stay up to date with the weather forecast for your area and follow advice from emergency services and local

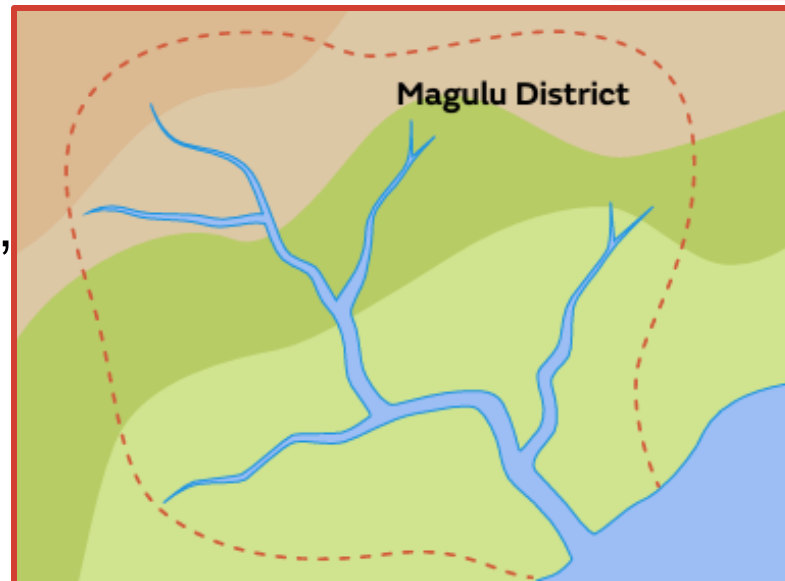
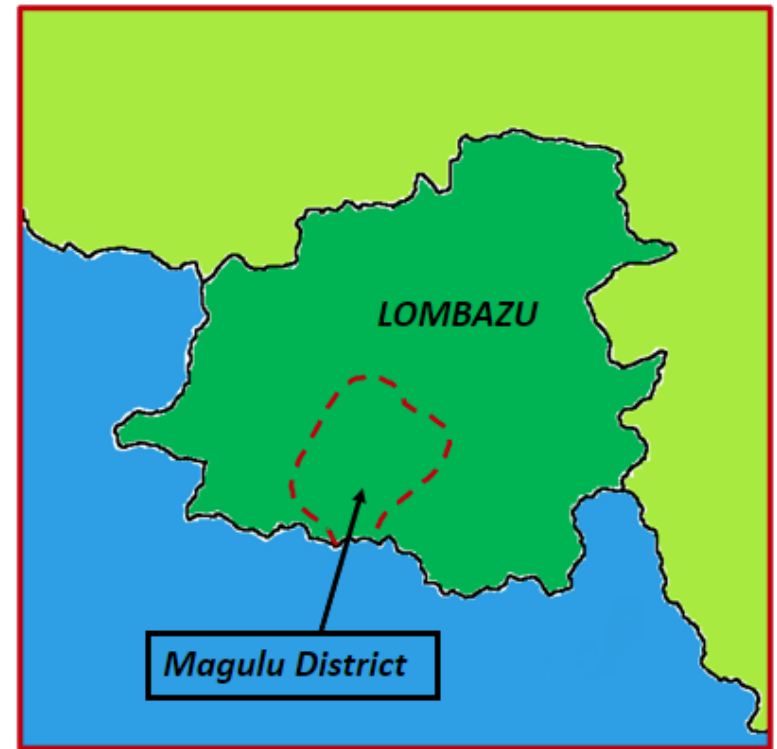




# Welcome to Magulu...

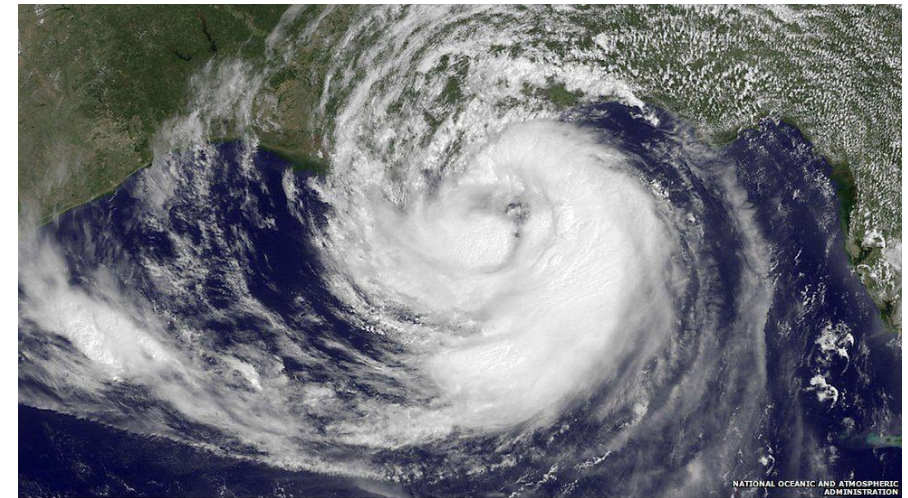
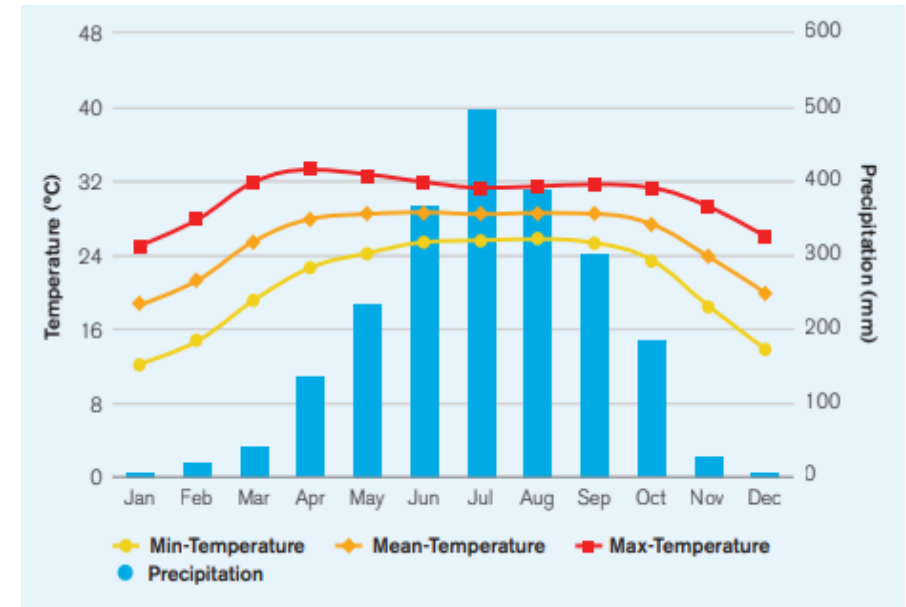
# Magulu District, Lombazu

- A fertile district in the south of Lo surrounding the Tala River, one of the most important river basins in the country
- Population ~182,000
- 70% of the population are considered to be vulnerable, living on less than \$2 per day
- Main livelihoods are agriculture, livestock and fishing



# Magulu Climate

- Humid, warm climate, dominated by a summer monsoon season
- Frequently experiences heavy rainfall with season rains occurring annually between April and September, peaking in July
- Tropical cyclones are not uncommon, and tend to be most likely, and most intense from May to June, and October to November
- Higher than average rainfall over the past 5 years has meant flooding has become a significant issue





# Magulu Early Action Planning

*You have been summoned by the district leader to a meeting to understand actions your sector may take in advance of any severe weather to help improve preparedness and the communication of advice to the public...*

- **Red Cross** – Magulu District Branch Representative
- **Ministry of Agriculture and Fisheries Extension Worker** – Magulu District
- **Disaster Risk Officer** – Magulu District
- **Civil Society Representative** – Magulu Small Business Collective (Rice Producers Union)
- **Senior Health Official** – Magulu District
- **Department of Roads and Transport Manager** – Magulu District
- **Education Board Representative & Headmaster** – Magulu District
- **Engineer** – Utilities and Communication Network Engineer for PowerGen
- **Broadcast Journalist** – Lombazu Broadcasting Corporation

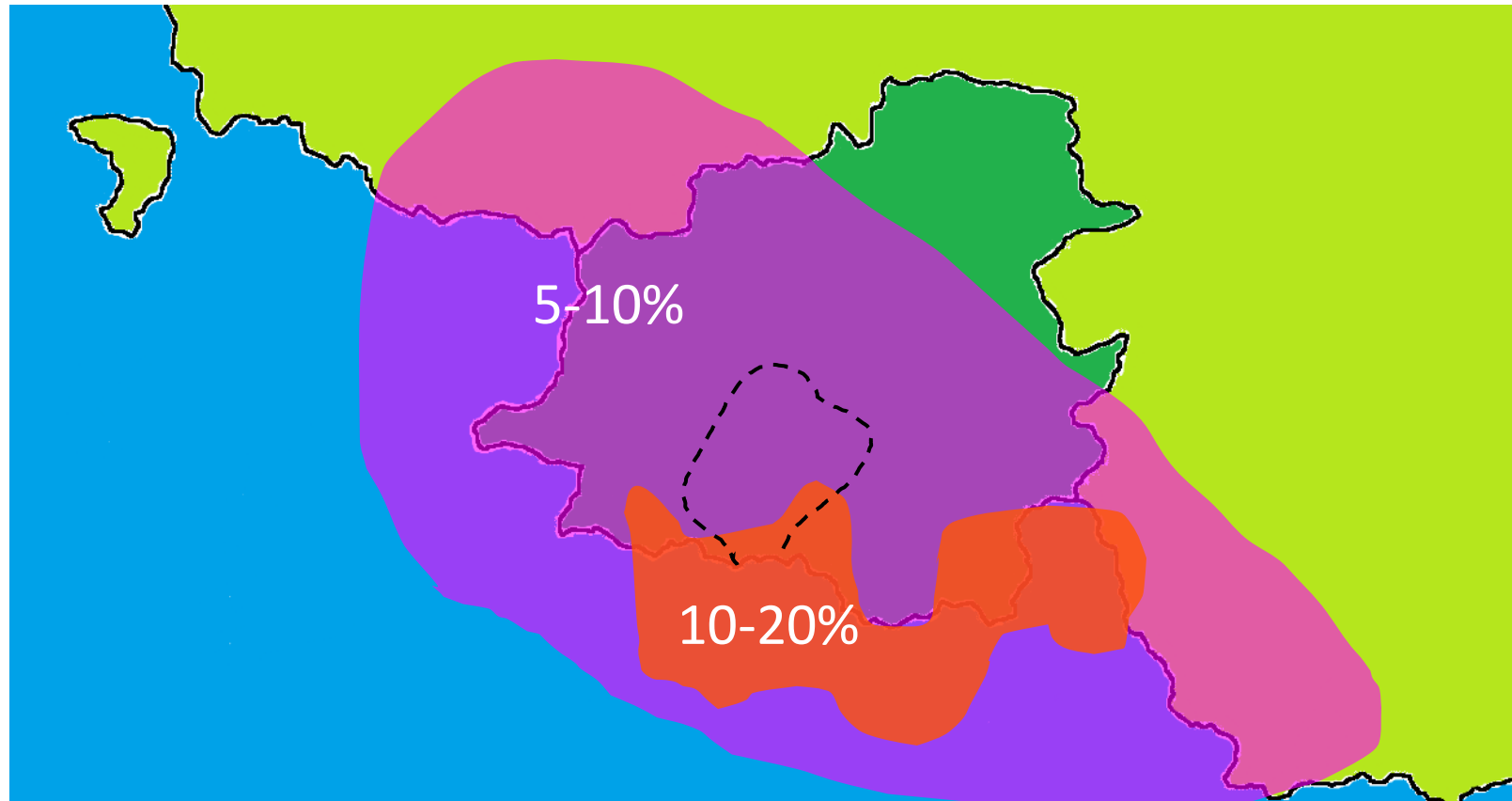


**Task:**  
**What *anticipatory actions* might you take (in your newly assigned roles) in Magulu District, in the event of heavy rains, or a tropical cyclone, being forecast?**



# Magulu Forecast

# May 7<sup>th</sup> (D-13)



# Potential forecast ~2 weeks ahead

There are early indications of an **increased risk** of a tropical storm developing in the Bay of Lombazu during the next week, **potentially** tracking north towards the end of the forecast period.

While the current likelihood of a direct hit from a tropical storm is **very low**, there is a chance Lombazu may still see some heavy rain, strong winds and lightning, **in contrast to** the settled conditions experienced lately, with a **very low likelihood** of some low-level impacts from these.

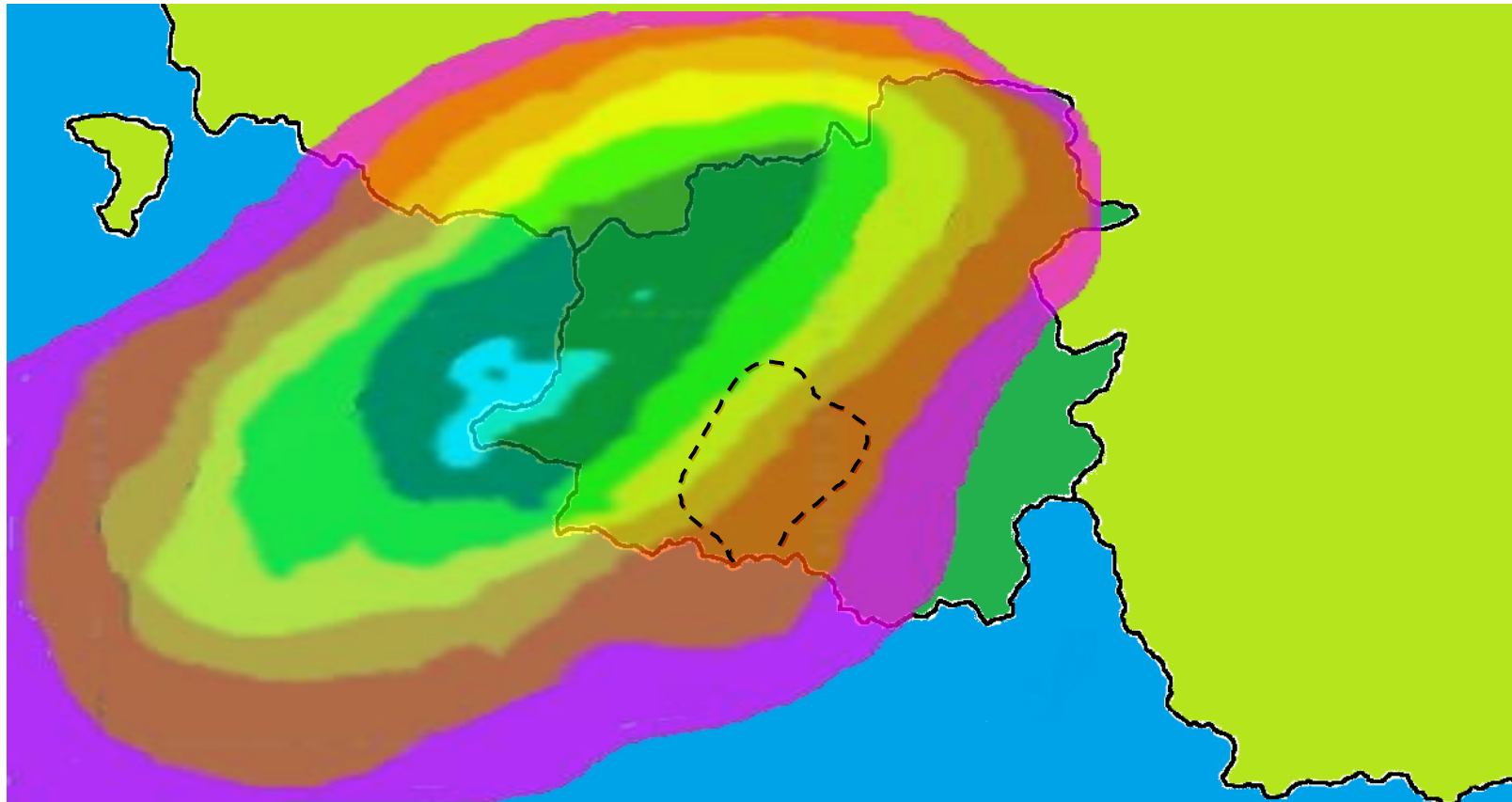


# Anticipatory Action?

Would you (in your stakeholder role you assumed) take any anticipatory action at this point (~2 weeks ahead)?

You have **60 seconds** in your groups to decide on any anticipatory action (bring the relevant post-it note to the front).

# May 13<sup>th</sup> (D-7)



Likelihood	High				
	Medium				
	Low			✓	
	Very low			✓	✓
		Very low	Low	Medium	High
	Impact				

# Potential IBF forecast ~1 week ahead

There is a **high chance** of a TC developing in the coming days, which **may** track towards Lombazu by the weekend... some uncertainty regarding the track of the system...currently only a **very-low likelihood** that it will make landfall in Magulu... **most likely track** takes it to the west...still **a very low risk** of seeing impacts from heavy rain, strong winds and lightning.

**Potential impacts:** Large swell, rough seas and storm surge **may** lead to some coastal flooding. Heavy rains **could** cause flash flooding in **some areas**. Strong winds **may** result in flying debris which could cause injury and some minor property damage.



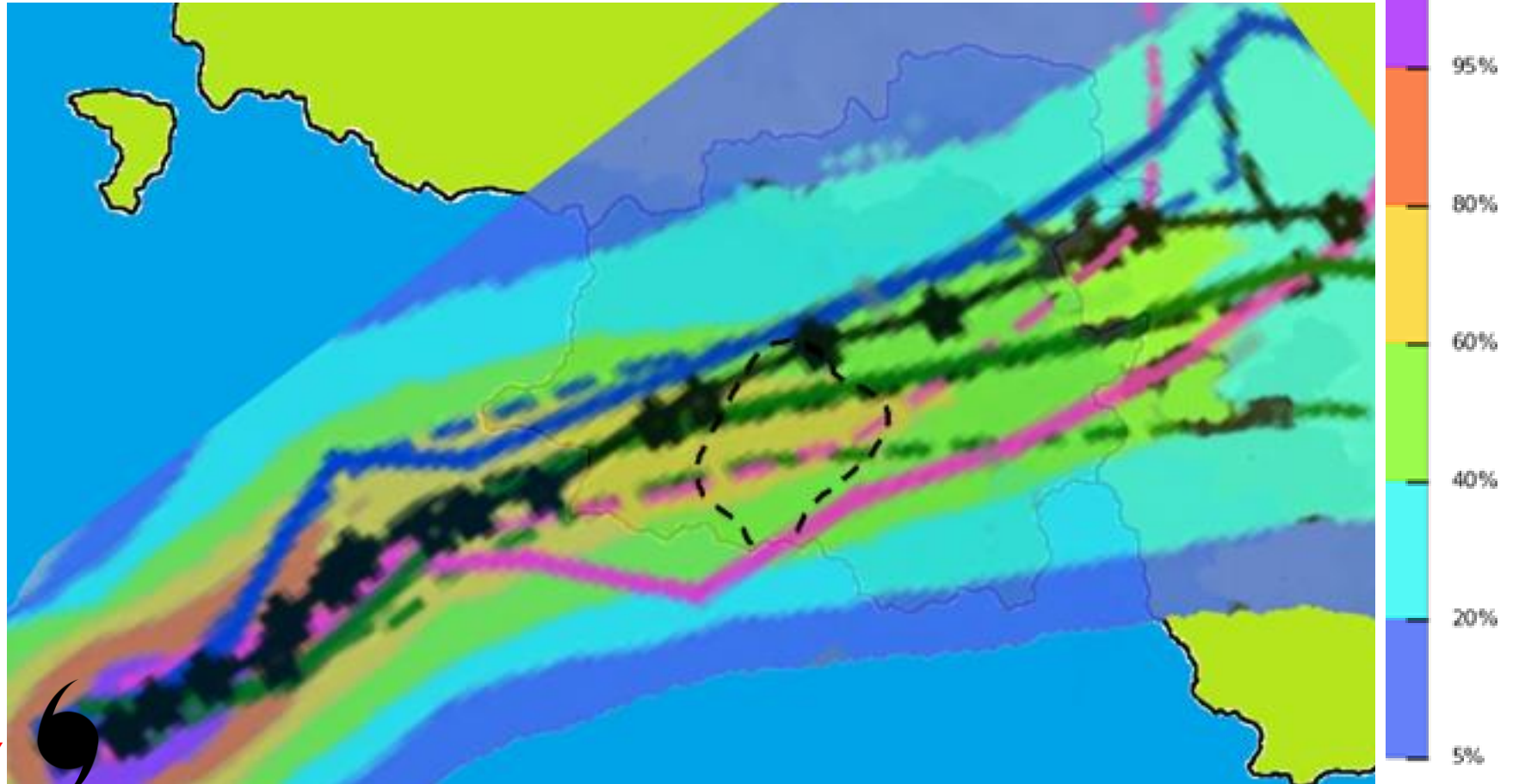
# Anticipatory Action?

Would you (in your stakeholder role you assumed) take any anticipatory action at this point (~1 week ahead)?

You have **60 seconds** in your groups to decide on any anticipatory action (bring the relevant post-it note to the front).

# May 18<sup>th</sup> (D-2)

Deterministic: Met Office GM ——— ECMWF ——— GFS ———  
Ensemble mean: MOGREPS-G - - - EC ENS - - - GEFS - - - Multimodel - - -



TC  
METTY



Likelihood	High			✓	
	Medium				✓
	Low				
	Very low				
		Very low	Low	Medium	High
	Impact				

# Potential IBF forecast ~2 days ahead

TC Metty **has formed**...still **some uncertainty** where the TC will make landfall... **most likely scenario** ...landfall to the west...there is a **low risk** it could make landfall near Magulu. Even if it does not ...there is an **increased likelihood** of seeing moderate or even significant impacts from heavy rain and strong winds...**high likelihood** of severe coastal gales...very rough seas.

**Potential impacts:** Large swell, very rough seas and storm surge **could** lead to coastal flooding. Heavy rains **potentially causing** flash flooding and **possibly** some river flooding. Strong winds **likely to** damage properties, interrupt utility supplies for a time and flying debris poses a risk of injury. Transport networks **may be** disrupted in some locations.

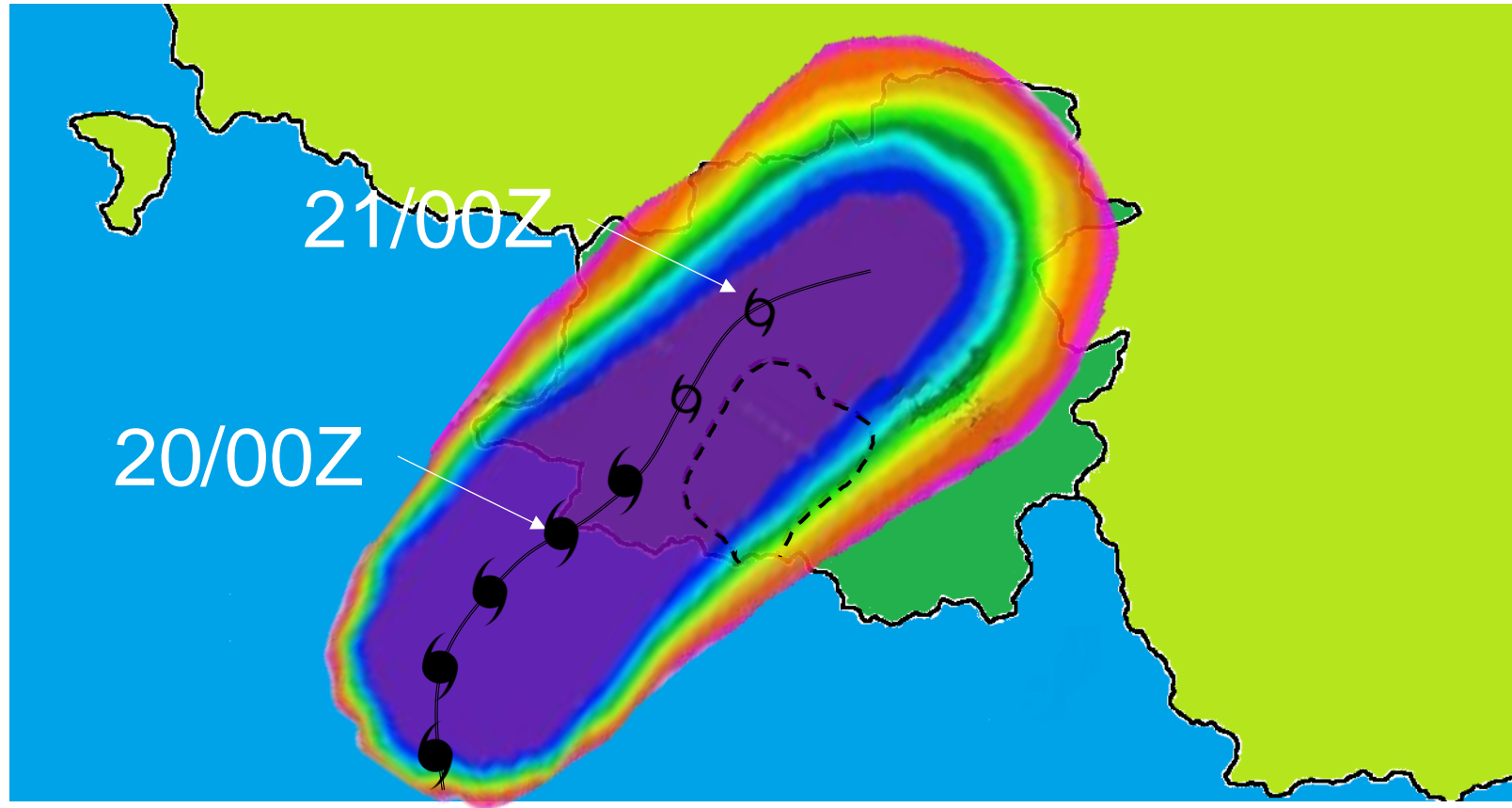


# Anticipatory Action?

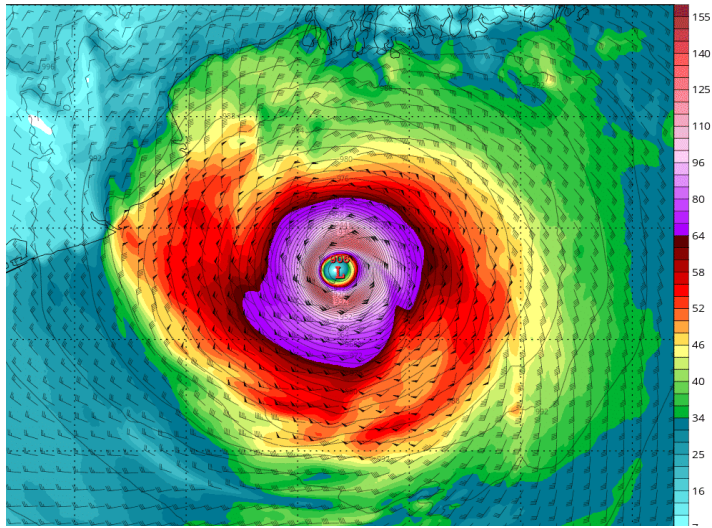
Would you (in your stakeholder role you assumed) take any anticipatory action at this point?

You have **60 seconds** in your groups to decide on any anticipatory action (bring the relevant post-it note to the front).

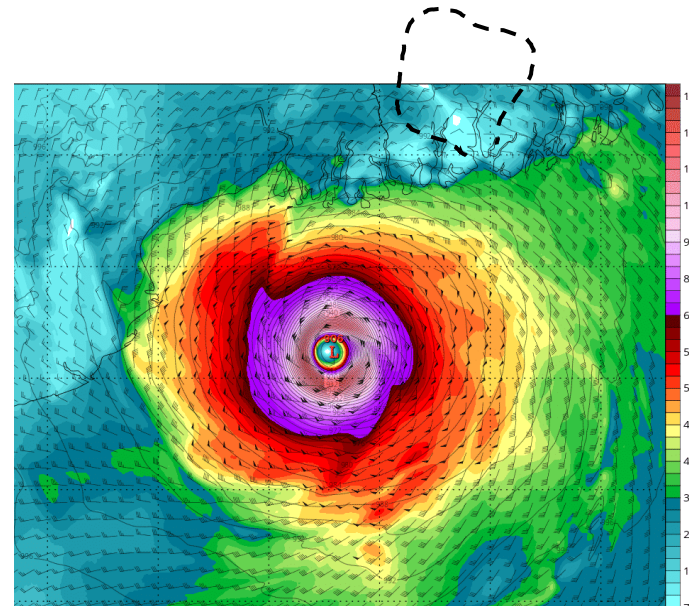
# May 19<sup>th</sup> (D-1)



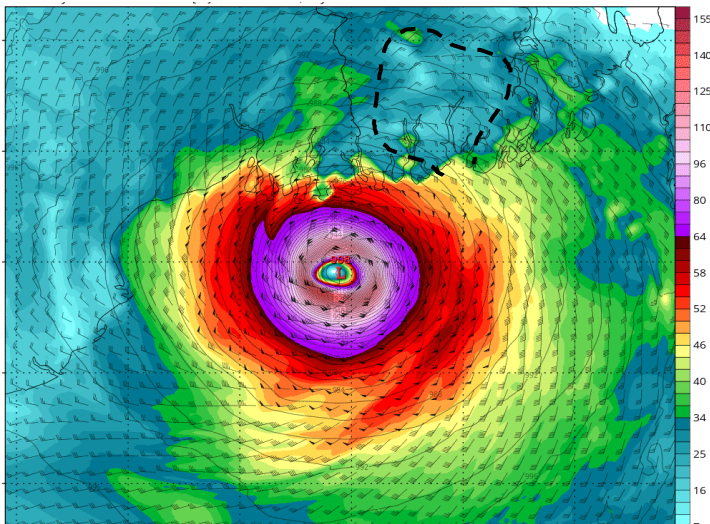
19/12Z



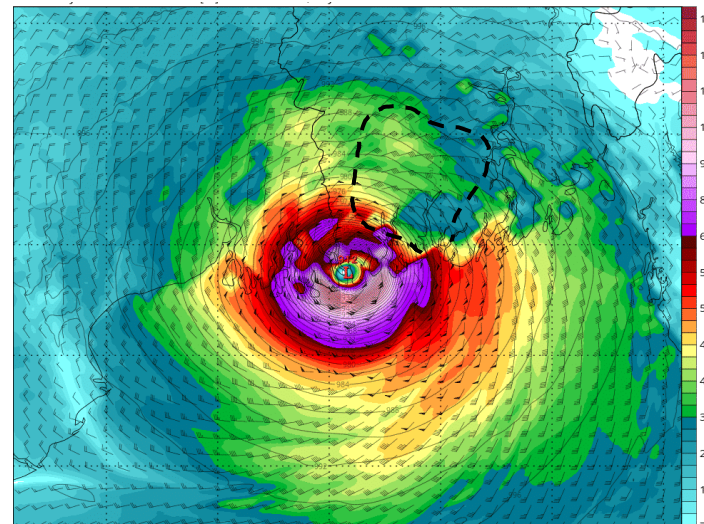
19/18Z



19/21Z



20/00Z



Likelihood	High				✓
	Medium				✓
	Low				
	Very low				
		Very low	Low	Medium	High
	Impact				



# Potential IBF forecast ~1 day ahead

TC Metty is **expected to** continue to track NNE through the next two days to make landfall in the early hours of 20<sup>th</sup> May, **most likely** just to the west of Magulu District. This brings a **high likelihood** of seeing significant impacts from heavy rain, strong winds and lightning as well as storm surge.

**Potential impacts:** Large swell, very rough seas and storm surge **leading to** coastal flooding. Heavy rains **likely to cause** flash flooding and river flooding, **likely** inundating some settlements along the river. Strong and damaging winds are **likely to** cause damage to properties and utilities. Journey times will take longer and there is **a risk of** cancellations to some services. Some communities **may** become cut off.

# Anticipatory Action?

Would you (in your stakeholder role you assumed) take any anticipatory action at this point?

You have **60 seconds** in your groups to decide on any anticipatory action (bring the relevant post-it note to the front).

# Risk Matrix – evolution with time

Likelihood	High	Green	Yellow	Orange	Red ✓
	Medium	Green	Yellow	Orange	Orange
	Low	Green	Green	Yellow	Orange
	Very low	Green ✓	Green	Yellow	Yellow
		Very low	Low	Medium	High
		Impact			

**Producers  
of weather  
and climate  
service**

**Co-production**

**Users  
of weather  
and climate  
service**

Understanding of lead  
times & risk appetite of  
users

Open

Collaborative

Constructive


Targeted

Structured

Understanding of the  
forecast uncertainties

(Agreed) Anticipatory Actions &  
Documented Action Plans





**Thank you!**  
**Any Questions?**

**Helen Caughey**  
Deputy Chief & International Meteorologist  
[helen.caughey@metoffice.gov.uk](mailto:helen.caughey@metoffice.gov.uk)

**Nyree Pinder**  
Global Partnership Manager  
[nyree.pinder@metoffice.gov.uk](mailto:nyree.pinder@metoffice.gov.uk)

# Tell us about your experience!

## List of challenges and gaps

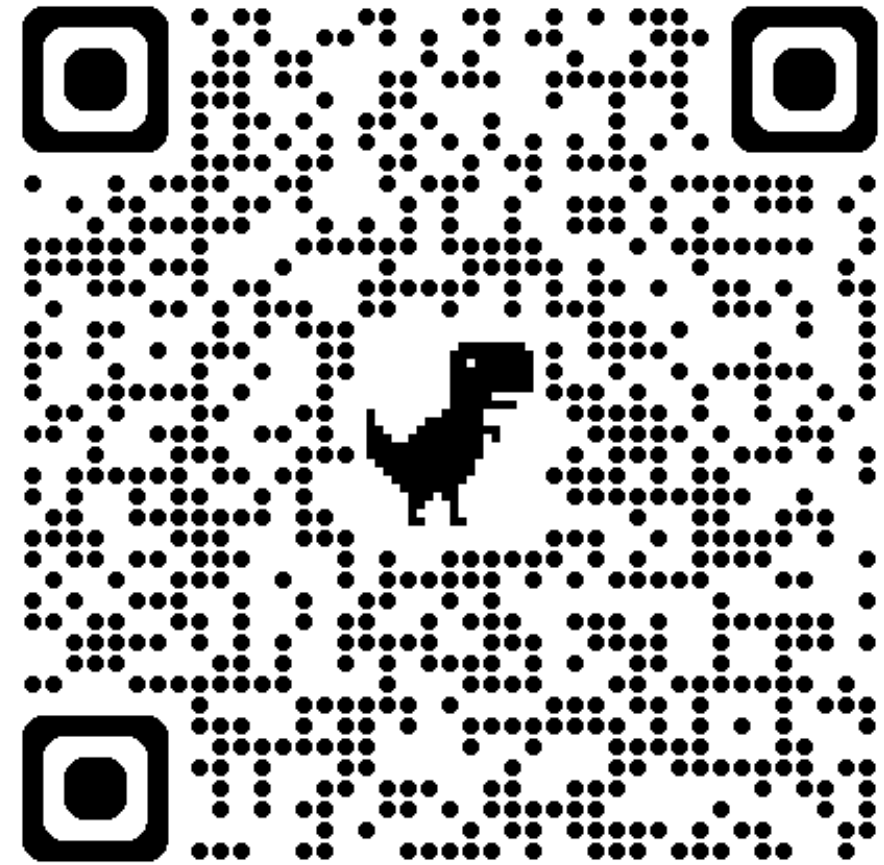
in attempting to build or strengthen early warning systems or early/anticipatory action protocols. This can be on any of the themes covered during the day (forecasting, inclusion, conflict environment and financing) or others.

## Solutions

to overcome any of these challenges, whether they are more traditional (building on existing systems), innovative (disruptive approaches) or resilient (focused on sustaining the approach over time).

## List of resources / guides / research

that have been helpful in addressing your challenges.



## Session 2: Who are the people at the centre of EWS? *Using tradition and innovation to build resilience.*

### Speakers:

Mirianna Budimir John Harding Carina Fearnley Lisa Robinson Alice Castillejo Chiara Ambrosino  
Madhab Uprety Ella Gerry Nyree Pinder

# Session structure

- Intro: why do we need to put people at the center? Who are they?
- Group activity: designing an EWS fit for diversity of people's needs.
- Lightning presentations: tools and techniques to support people-centered EWS.
- Panel discussion
  - Tradition and/or innovation for people
  - People and uncertainty
  - People in conflict
  - People-centered finance



# THE ROLES OF STATE AND NON-STATE ACTORS IN EARLY WARNING AND EARLY ACTION

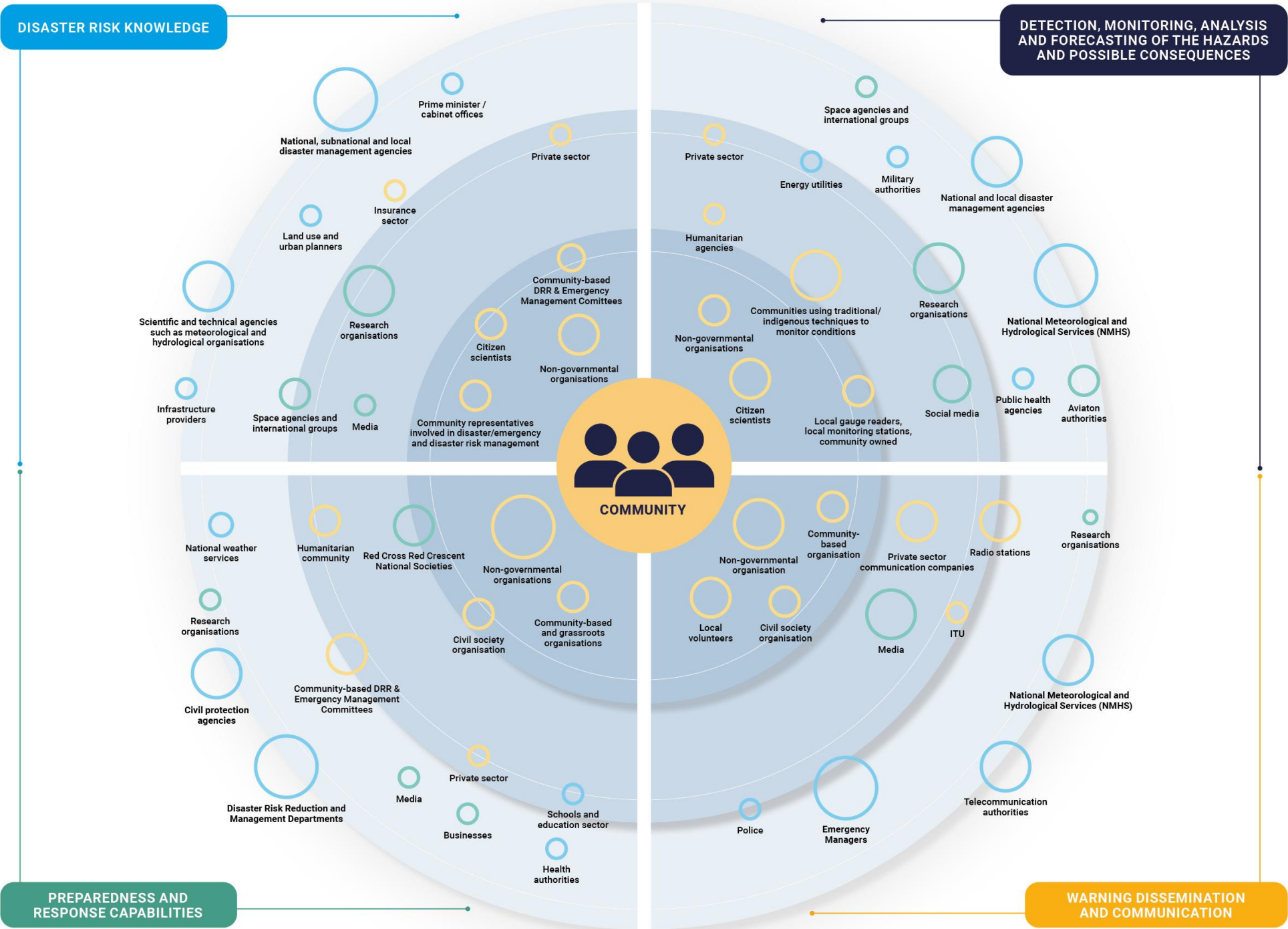
CAPACITY GAPS AND COLLABORATION

*New REAP report!*

**The Roles of State and Non-  
State Actors in Early Warning  
and Early Action.**

DISASTER RISK KNOWLEDGE

DETECTION, MONITORING, ANALYSIS AND FORECASTING OF THE HAZARDS AND POSSIBLE CONSEQUENCES



PREPAREDNESS AND RESPONSE CAPABILITIES

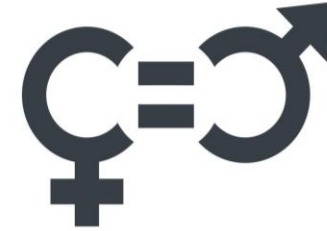
WARNING DISSEMINATION AND COMMUNICATION



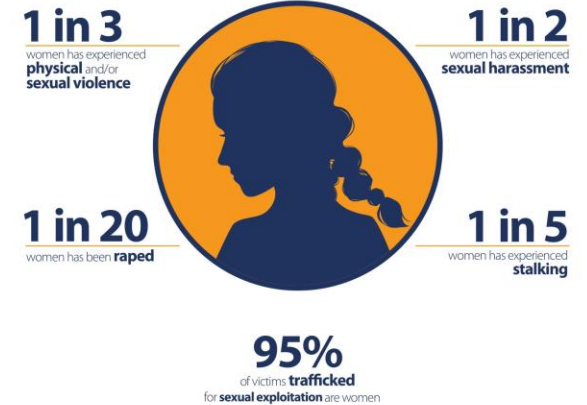
COMMUNITY

# Socio-demographics

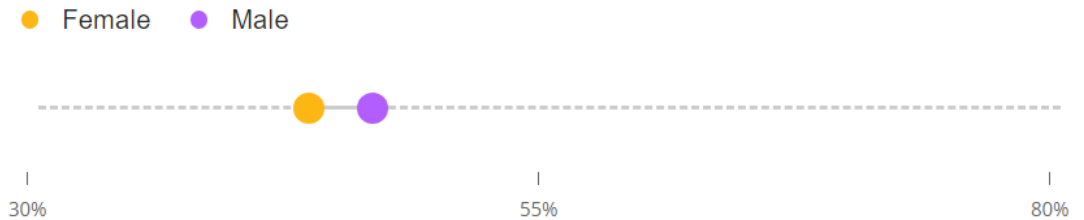
- 12 languages spoken, 50% speak the "official" language Lambazan
- 7% of women own a home
- Third gender is legally recognised
- 2.2% of the population are registered with a disability
- Women's access to mobile phones (71%), internet through mobiles (37%), & smart phone ownership (26%)
- Eight predominant ethnic groups, the most common (Lambazuan) makes up 40% of the population
- An indigenous population (Talans) live in the coastal area
- IDPs camps have high population of Talans



**Global Gender Gap Index:  
0.602 (scale: 0-1)**



**Lower secondary completion rate, by sex (% of relevant age group)**



**Adult literacy rate, by sex (% of people ages 15 and above)**



# Group activity

- Resources:
  - Socio-demographic information.
  - Example profiles of people who live in our case study context.
  - A list of questions to consider when designing EWS, using framework.
  - Flipchart and pens.
- To do:
  - Read your person profile.
  - Discuss in teams the questions. Advocate on behalf of your person so their needs are met in the EWS. Based on your team's familiarity, decide whether to:
    - Pick one component of the EWS and stick with that.
    - Try to cover one question per EWS component.
  - Write down specific actions that could be taken to design the system to work for your person.
    - e.g. building a ramp up to the flood shelter to accommodate for wheelchair access.
- Time: 30 minutes
- After: table hosts to share one action and reflection of what they struggled with.



# Feedback

- One action your team took to address the needs of the people.
- Reflection on what your team struggled with:
  - Knowledge gaps
  - Disagreement on actions
  - Expertise missing from your table

# Lightning presentations

- Guide to people-centered EWS. John Harding, CREWS.
- Inclusive EWS guide. Carina Fearnley, UCL.
- Pocket guide for risk communication strategies. Lisa Robinson, BBC Media Action.
- Linguistic diversity for EWS. CLEAR Global, Alice Castillejo.
- The Missing Voices Approach. Practical Action, Mirianna Budimir.
- Protection, Gender and Inclusion in Anticipatory Action Toolkit. Plan International, Chiara Ambrosino.



**GUIDANCE DOCUMENT**  
**on People-Centered Risk-Informed**  
**Early Warning Systems**



People-centered, risk-informed early warning system approaches are described in 6 chapters:

- Defining the goal, scope, and scale of people-centered early warning systems
- Identifying and engaging actors
- Co-creating a collaborative design process
- Co-exploring, co-developing, and co-delivering solutions
- Capacity building and learning
- Monitoring and evaluation



ENGLISH:  
[https://library.wmo.int/  
idurl/4/67171](https://library.wmo.int/idurl/4/67171)

# Designing Inclusive, Accessible Early Warning Systems: Good Practices and Entry Points

*University College London*  
**GFDRR**

Carina Fearnley, Warning Research Centre





Risk Communication for Early Action

**B B C MEDIA ACTION**



**Pocket Guide  
on  
Risk Communication  
to support  
Early Action**

**What do you know?  
  
A research guide  
for understanding  
people and  
media ecosystems for  
disaster risk  
communication**

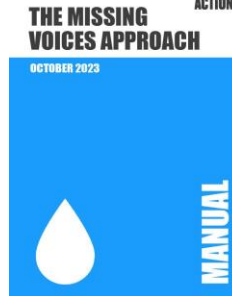
In partnership with



# Language Exclusion in Early Warning Systems

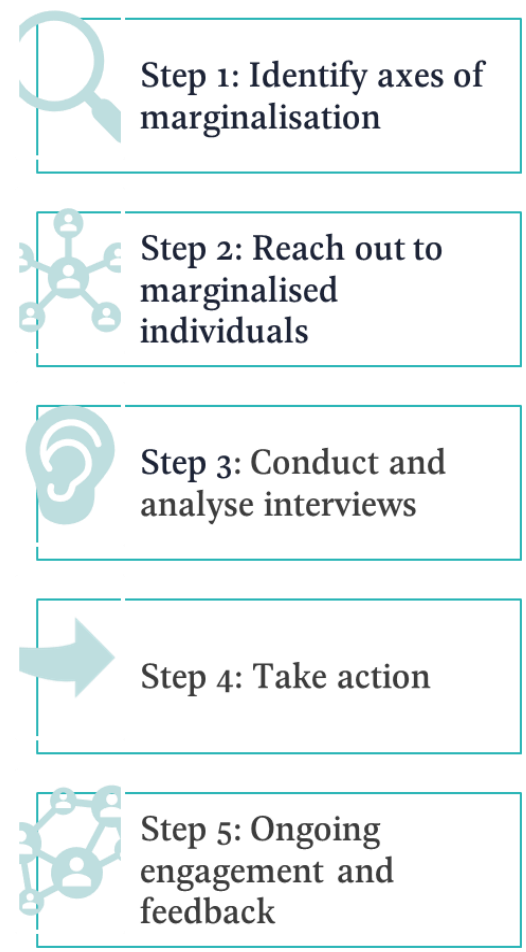
## *CLEAR Global*

Alice Castillejo, CLEAR Global



# The Missing Voices Approach

- Understanding how inequalities and injustice shape vulnerabilities to disasters.
- Responding to the fundamental right to be heard. Understanding the experiences and perspectives of marginalised people.
- Narratives can be powerful for advocacy purposes as it provides human connection and understanding beyond statistics and numbers.
- Addressing gaps in the data. Specifically seeking out the voices that we don't hear. Including "outliers" in our programming.
- Inclusion in decision making. Prioritising privacy, safety and insightful narratives. Emphasising the value of qualitative data for influence.



<p><b>RISK KNOWLEDGE</b></p> <p>“I have never attended any meetings. They are mainly attended by men. They don’t often ask women to them, and when they do, it is only the educated women. Not women like me. I don’t think I would even understand what they’re saying, let alone learn anything.”</p> <p>- Elderly widow, Far-west Nepal</p>	<p><b>RESPONSE CAPABILITY</b></p> <p>“I cannot move without other’s assistance, so I had to face difficulties all through the flood and erosion. While everyone was busy moving the house I was scared that I would be left behind and get swept away by the current of water... Considering my circumstance I could not respond to river erosion at all.”</p> <p>- Man with disability, Bangladesh</p>
<p><b>MONITORING AND WARNING</b></p> <p>“When I returned to get our belongings, it was no use. The flood already reached our house. It was impossible to get in.”</p> <p>- Expectant mother at time of flooding, Philippines</p>	<p><b>DISSEMINATION AND COMMUNICATION</b></p> <p>“I only realized water had entered our home at three in the morning. I had no phone or radio then so I received no early warning.”</p> <p>- Single woman with young children, eastern Nepal</p>

# Protection, Gender and Inclusion in Anticipatory Action: Toolkit

## *Plan International*

Chiara Ambrosino, Plan International



# Panel discussion



**Mirianna Budimir**

Senior Climate  
and Resilience Expert

Practical Action



**John Harding**

Head of the Climate  
Risk and Early  
Warning Systems  
(CREWS) Secretariat

World Meteorological  
Organization



**Lisa Robinson**

Head of Advisory  
BBC Media Action



**Nyree Pinder**

Global Partnerships  
Manger

UK Met Office



**Madhab Uprety**

Technical Adviser and  
Asia-Pacific focal point


Red Cross Red  
Crescent Climate  
Centre



**Ella Gerry**

Technical Advisor,  
Crisis Anticipation and  
Risk Financing

Start Network



WE INTERRUPT THE  
REGULARLY SCHEDULED  
PROGRAM TO BRING YOU  
THIS IMPORTANT MESSAGE

# Tell us about your experience!

## List of challenges and gaps

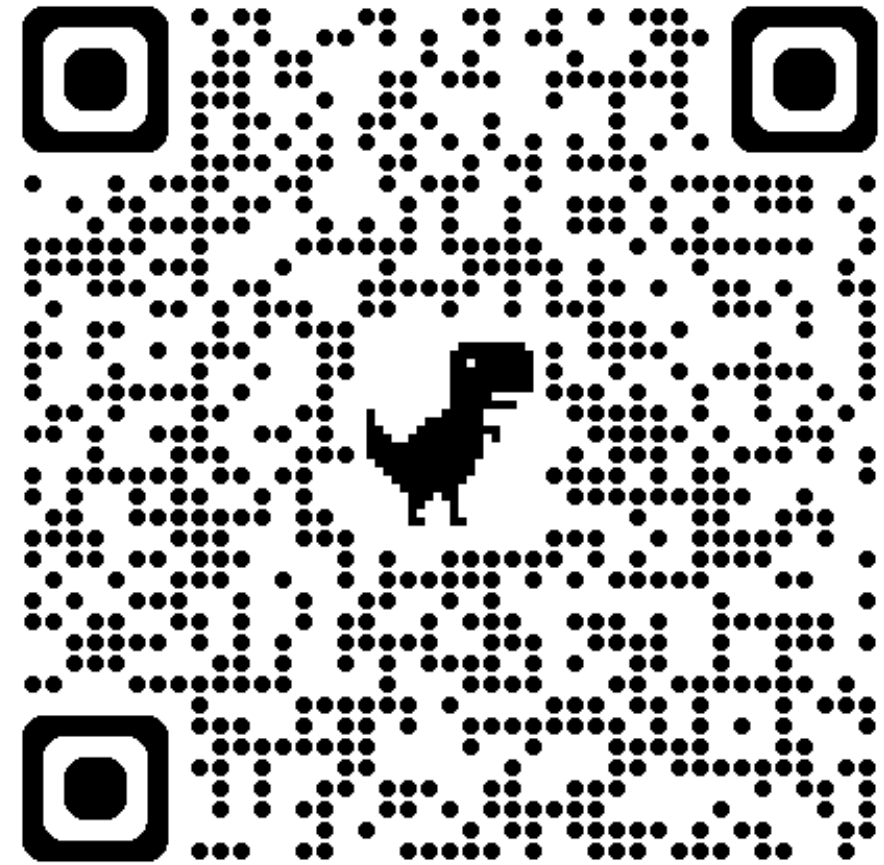
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## List of resources / guides / research

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TRADITION • INNOVATION • RESILIENCE

# Session 3: Early Warning and Early Action in Conflict-affected contexts

Catalina Jaime, Head of Climate and Conflict, Red Cross Red Crescent Climate Centre





# Early Warning Early Action in Conflict-affected Contexts



# Politics

- Politically, Lombazu, is a fragile state.
- Tensions are high, and the satisfaction with current government is low.
- Opposition parties have been pushing for elections to be held this year but there has so far been resistance to this.
- There have been recent violent clashes across the country, including Magulu.
- Magulu, especially in the district capital, has seen a rise in militia activity.

---

By 2030, **2.2 billion people** will live in fragile states, which will represent **26% of the total world population**

---

Of those, **359 million** are projected to be living in extreme poverty, representing **63% of the world's poor**

---

**Across the 10 most fragile states in conflict, only \$223 million in climate adaptation finance was received in 2021 – less than 1% of total adaptation finance flows**

---

Currently **110 million people** are forcibly displaced worldwide due to persecution, conflict, and other causes of human rights violation

---

Refugee and IDP sites experiencing the most hazards are in conflict-affected countries **least equipped to adapt or respond** to them.

---

**95% of displaced people** live in areas exposed to at least two hazards, illustrating the importance of multi-hazard early warning systems for displaced populations.



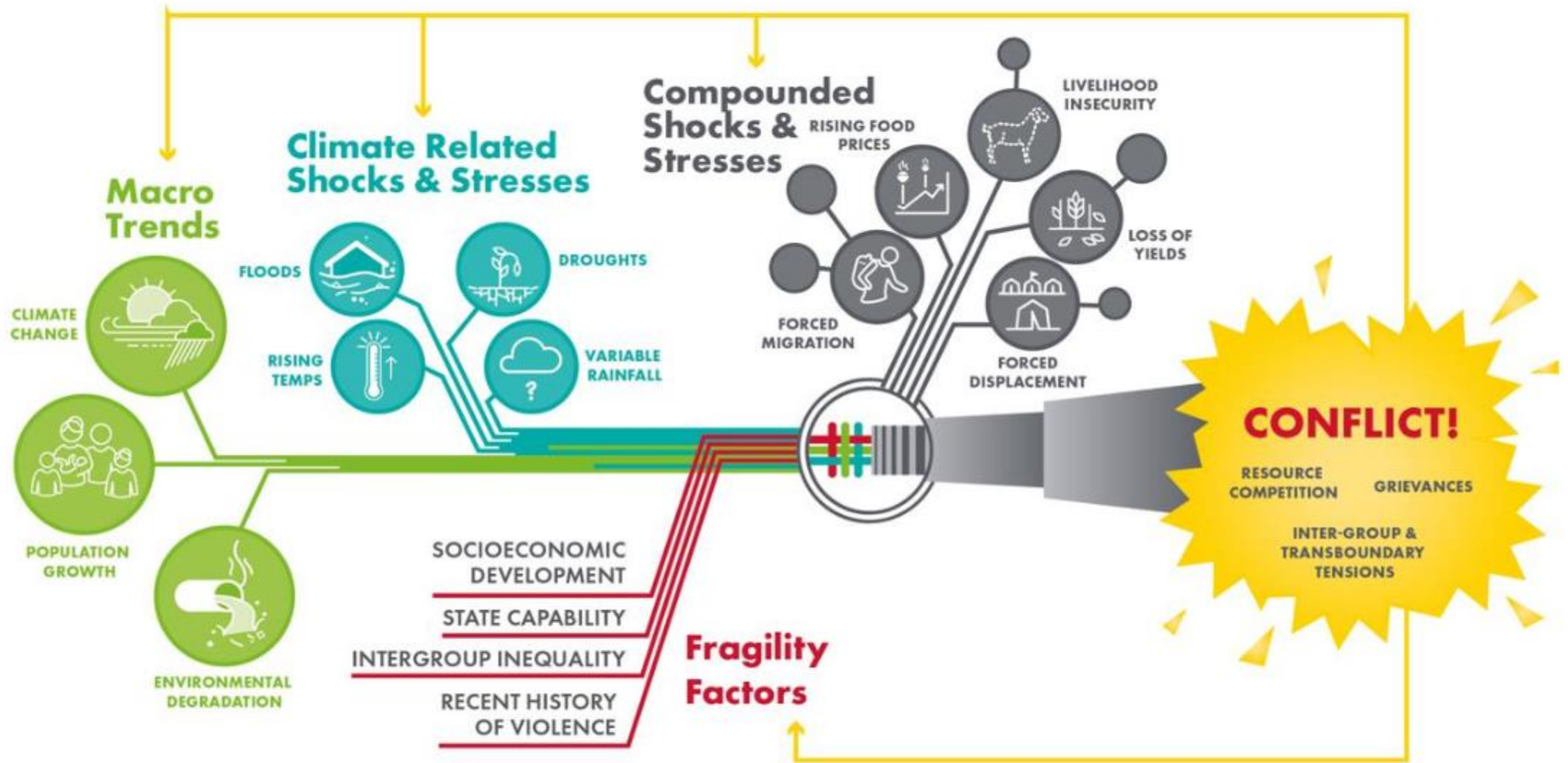
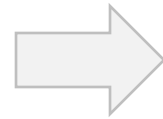


Figure 4: Mercy Corps' Climate and Conflict Resilience Assessment Framework.

# Early Warning Early Action Thematic Framework

Multi-hazard Early Warning  
System Framework –  
World Meteorological  
Organization<sup>1</sup>



- Understanding risk
- Forecasting availability and monitoring
- Communication and dissemination
- Early action planning
- Financing systems



Anticipatory Action  
framework Red Cross Red  
Crescent<sup>2</sup>

## ENVIRONMENTAL RESEARCH LETTERS

---

ACCEPTED MANUSCRIPT • OPEN ACCESS

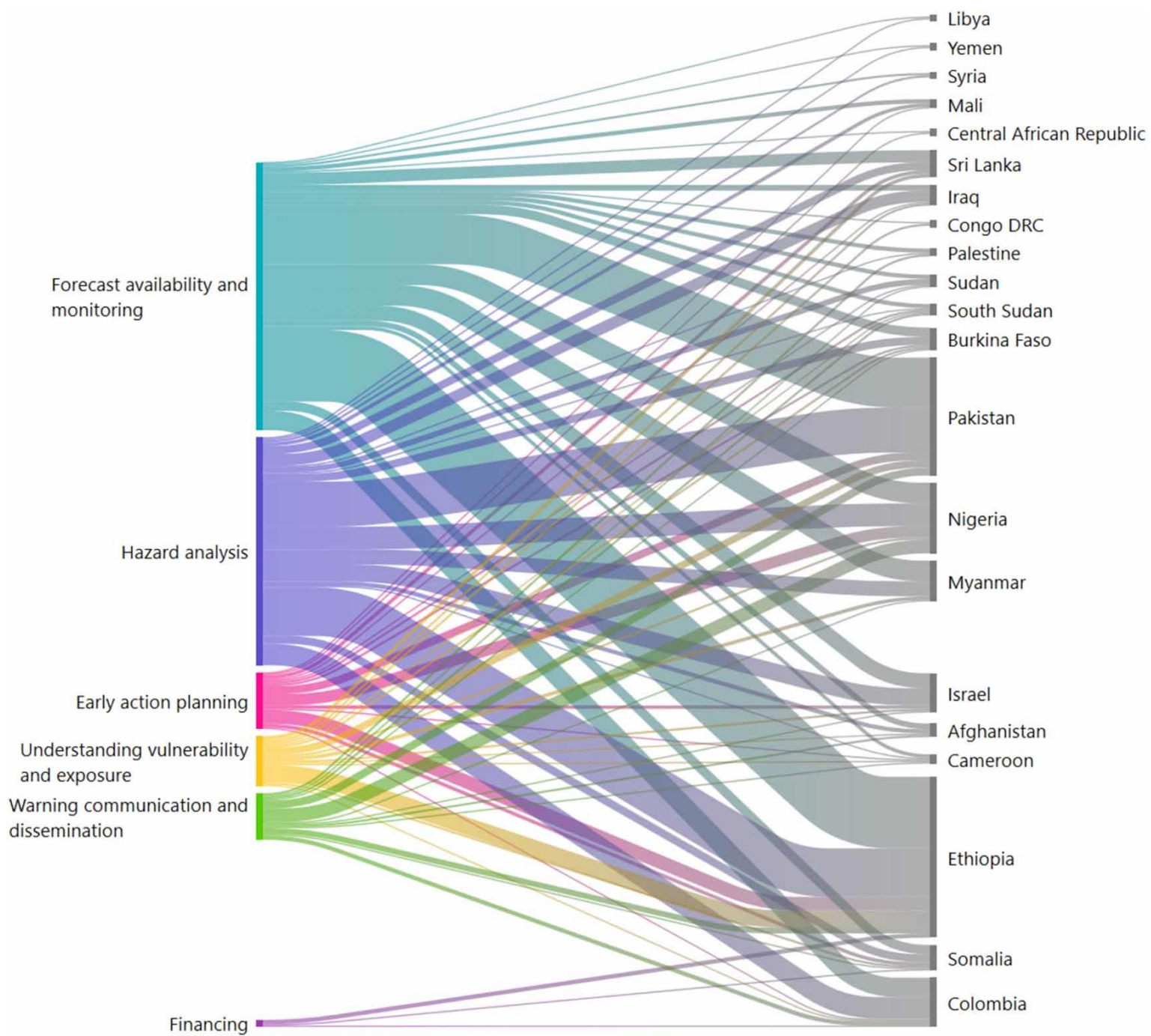
# Beyond the forecast: knowledge gaps to anticipate disasters in armed conflict areas with high forced displacement

Catalina Jaime<sup>1</sup> , Erin Coughlan de Perez<sup>2</sup>, Maarten van Aalst<sup>3</sup>  and Evan Easton Calabria<sup>2</sup>

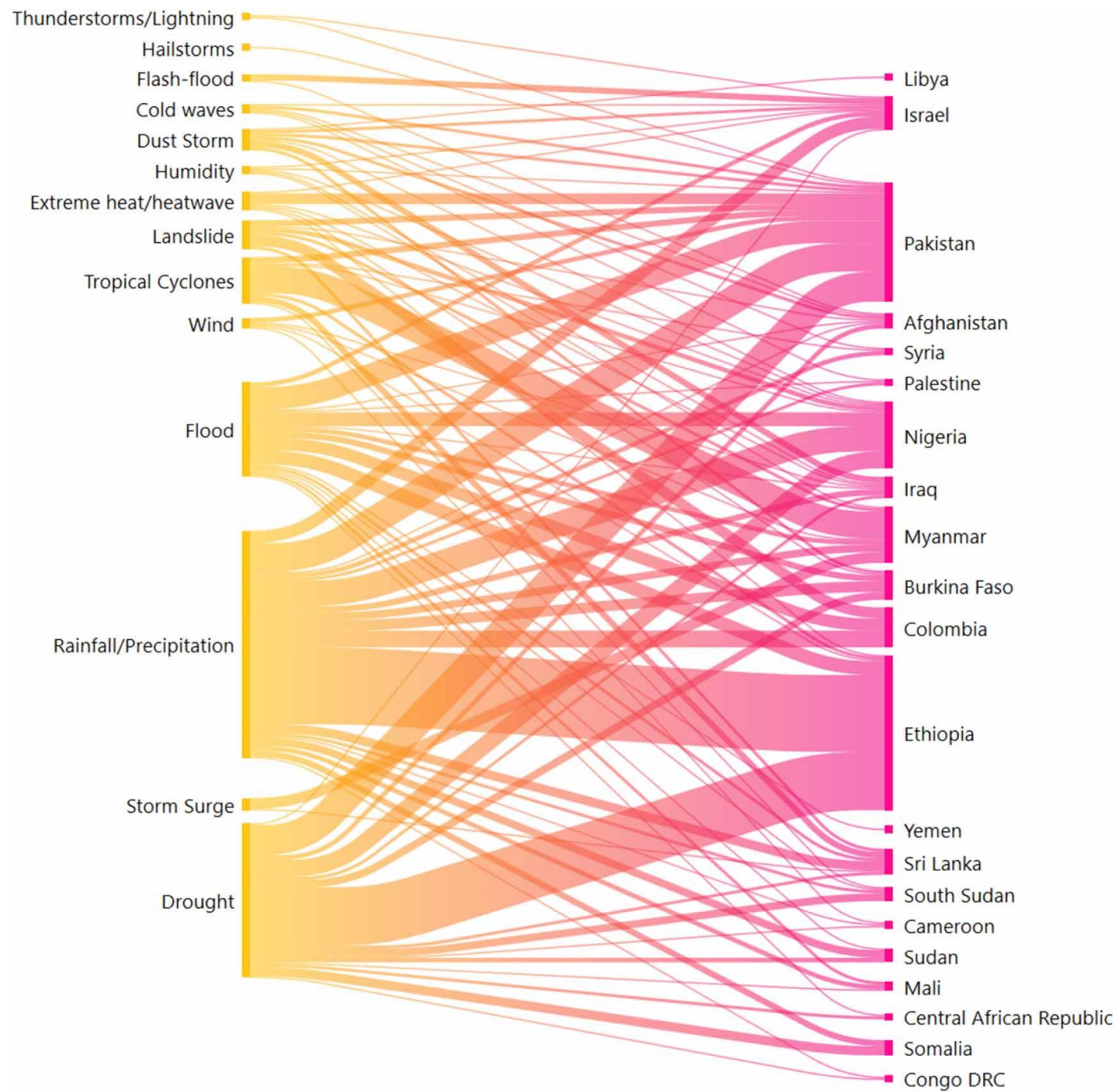
Accepted Manuscript online 18 January 2024 • © 2024 The Author(s). Published by IOP Publishing Ltd

[What is an Accepted Manuscript?](#)

DOI 10.1088/1748-9326/ad2023







# What was known: Weather forecast availability and communication in conflict-affected countries

62% of the events, were forecast with at least 30% probability and at least 3 days lead time.














International Journal of Disaster Risk Reduction




Volume 83, December 2022, 103421




## What was known: Weather forecast availability and communication in conflict-affected countries

Catalina Jaime <sup>a b</sup>  , Erin Coughlan de Perez <sup>b c</sup>  , Maarten van Aalst <sup>a b d</sup>  , Emmanuel Raju <sup>e f</sup>  , Alexandra Sheaffer <sup>g</sup>  


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<https://doi.org/10.1016/j.ijdr.2022.103421> 

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*A truck of humanitarian assistance being loaded.*



*Communities securing water points with sandbags.*



*Access to communities is difficult during flooding because of road blockage.*



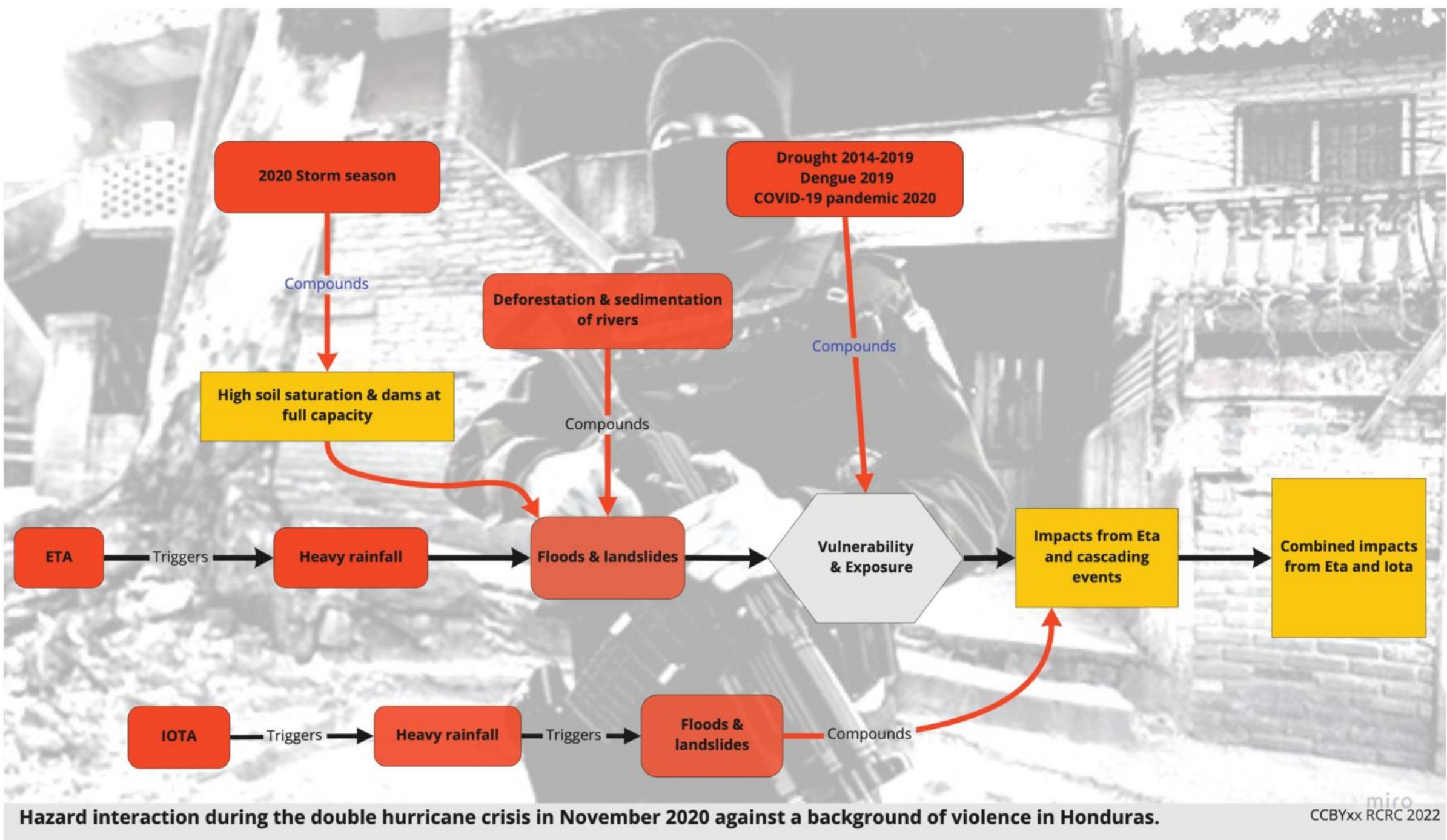
*A farmer in Beledweyne town protects his farm with sandbags.*



# Somalia Early Warning and Early Action for El Nino 2023

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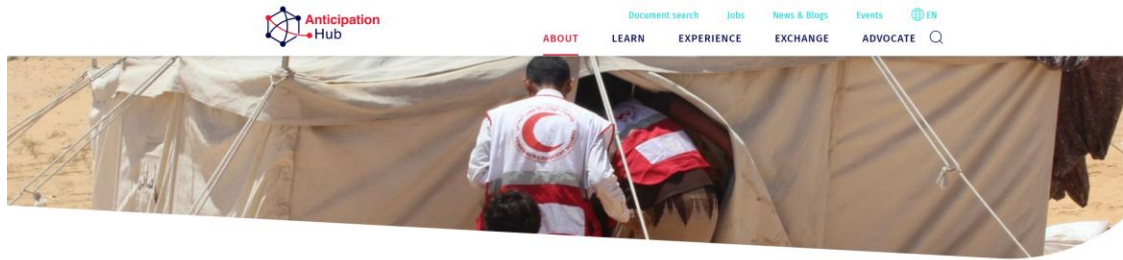




**Hazard interaction during the double hurricane crisis in November 2020 against a background of violence in Honduras.**

miro  
CCBYxx RCRC 2022





Home > Exchange > Working groups > Anticipatory Action in Conflict Practitioners' Group

Categories

WORKING GROUP ARMED CONFLICT

## Anticipatory Action in Conflict Practitioners' Group

Adapting to climate change is pivotal for people whose vulnerability has been increased by armed conflict. People affected by conflict are highly susceptible to suffer disproportionately from climate and weather-related hazards (ICRC 2020). To address this, disaster risk reduction in these complex contexts is a crucial part of the process to reduce disaster impacts. As part of these efforts, anticipatory action can help to protect people's lives, livelihoods, and wellbeing in the face of predictable hazards.





Switch to Low Carbon Version



العربية



United Nations  
Climate Change

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[Declarations](#)

[Media Hub](#)

[Actionism](#)

# COP28 DECLARATION ON CLIMATE, RELIEF, RECOVERY AND PEACE







## Takeaways

- **Re-think the current EWEA models** for decision making and early action implementation in conflict settings
- **Flexibility** to account for **conflict dynamics**, including **conflict sensitivity**.
- AA is only one piece of the puzzle to support people affected by conflict, **tackling the root causes of risk creation is the key!**

# Thank you!!



Catalina Jaime  
Head of Climate and Conflict  
Red Cross Red Crescent Climate Centre





- **NHMS reduced capacity** to produce forecast and disseminate messages.
- **Hydro Met stations** are left **abandoned** and directly **damaged** by the conflict
- Access is limited, **insecurity, violence** increasing
- **Local organisations and local leaders**, such as church, schools, health centres are the **key entry points** to conflict affected communities.
- **Mental and physical health** impacts are increasing
- **Landmines** in high risks areas of floods
- **Strong community collaboration** among them and network of connected municipalities and cities.
- Large number of population in **displaced camps** in high-risk flood zones



# Tell us about your experience!

## **List of challenges and gaps**

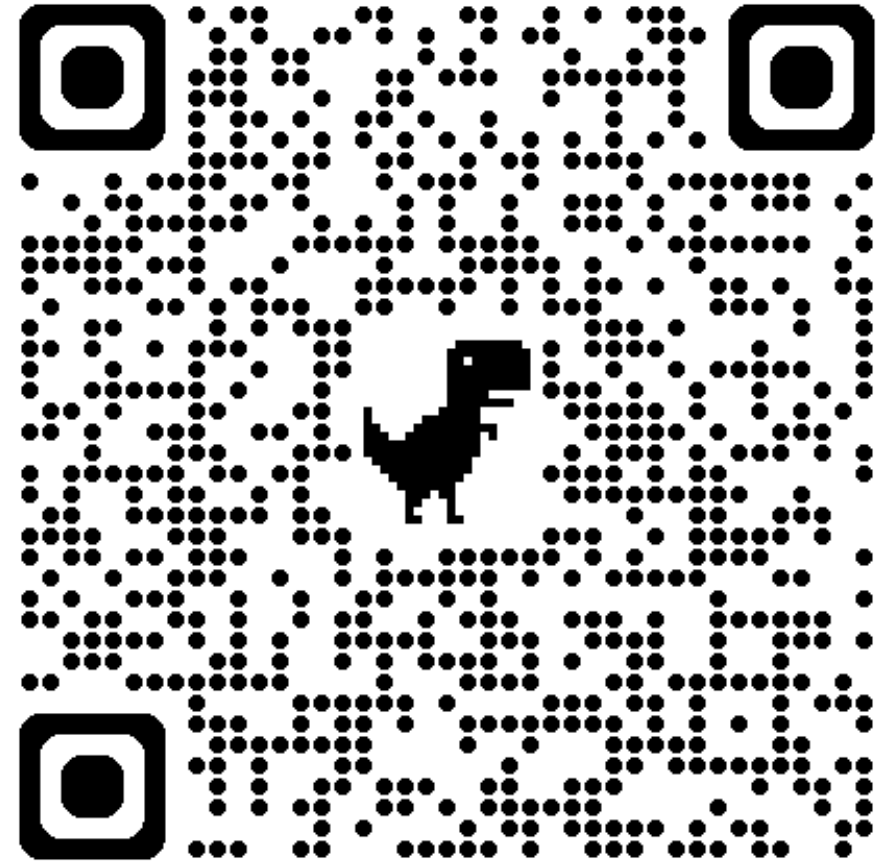
in attempting to build or strengthen early warning systems or early/anticipatory action protocols. This can be on any of the themes covered during the day (forecasting, inclusion, conflict environment and financing) or others.

## **Solutions**

to overcome any of these challenges, whether they are more traditional (building on existing systems), innovative (disruptive approaches) or resilient (focused on sustaining the approach over time).

## **List of resources / guides / research**

that have been helpful in addressing your challenges.





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TRADITION • INNOVATION • RESILIENCE

# Session 4: Innovative finance to scale up early warning and early action



UNDERSTANDING RISK  
GLOBAL FORUM 2024

TRADITION • INNOVATION • RESILIENCE

## 4.1. Exploring Alternatives to Traditional Trigger-Based Funding Mechanisms

Speakers:

Ella Gerry





# OUTCOMES

This session aims to demonstrate how allocation of funding can be done in dynamic situations and the value of multi-sectoral collaboration for decision making to address humanitarian needs.

- How is anticipatory action possible when financing has not been pre-agreed?
- How can uncertainty be mitigated and managed when making decisions about financing?
- What has Start Network learned about making difficult decisions about financing based on warnings with inherent uncertainty?

# START NETWORK

Network of over **90** non-governmental organisations (NGOs) around the world ranging from large **international** NGOs to **local and national** NGOs.

Shift the way humanitarian support is approached and delivered.

Creating global humanitarian financing systems that are focused on reducing risk and **anticipating and acting ahead of crises.**



# ANTICIPATORY ACTION

ACTING AHEAD OF PREDICTED HAZARDOUS EVENTS TO PREVENT OR REDUCE ACUTE HUMANITARIAN IMPACTS BEFORE THEY FULLY UNFOLD

# START FUNDS

RAPID, FLEXIBLE, POOLED  
CONTINGENCY FUNDING AND  
DYNAMIC DECISION-MAKING  
FOR SMALL TO MEDIUM-  
SCALE CRISES.

# START READY

PREDICTABLE TRIGGERED  
FUNDING AT SCALE FOR FORESEEABLE  
CRISES, USING RISK ANALYSIS,  
COLLECTIVE PLANNING,  
SCIENTIFIC MODELLING, AND  
PRE-POSITIONED FINANCING.

ANTICIPATION

N.B. The hazards presented in this graphic are illustrative



**START FUND**  
**START NETWORK**  
**ANTICIPATION**

A FAST, COLLECTIVELY-OWNED, ANTICIPATORY AND EARLY RESPONSE MECHANISMS, POWERED BY A DECENTRALISED, COLLABORATIVE, AND LOCALISED NETWORK OF ORGANISATIONS



MONITORING OF PREDICTABLE AND UNPREDICTABLE RISKS



COLLABORATIVE RISK ANALYSIS OF DYNAMIC SITUATIONS



NGO OWNED DECISION MAKING

FOCUSING ON 3 TYPES OF HUMANITARIAN NEED



UNDER FUNDED SMALL TO MEDIUM SCALE CRISES



SPIKES IN CHRONIC HUMANITARIAN CRISES



FORECASTS OF IMPENDING CRISES

# THE START FUND ALERT CYCLE

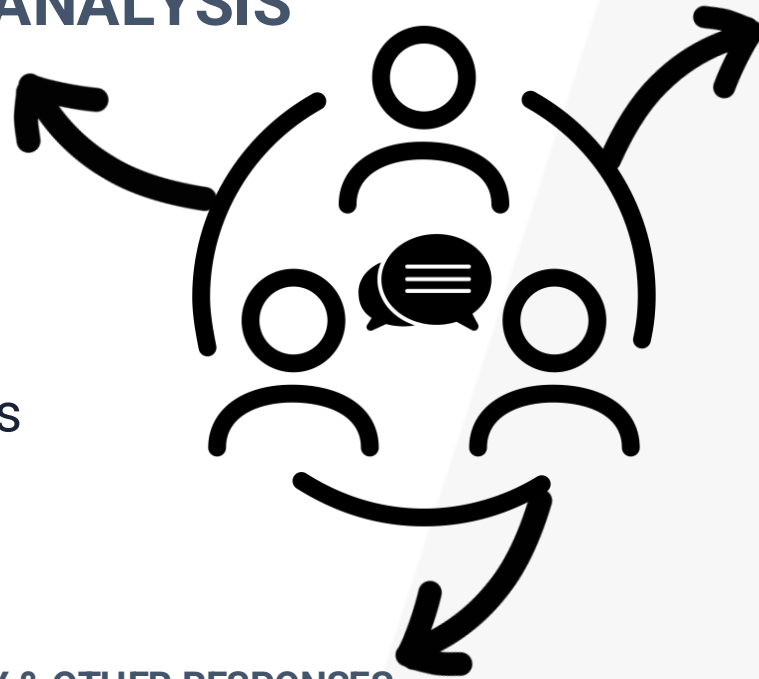




# ANTICIPATION ALERT CRITICAL QUESTIONS

## 1. QUALITY OF RISK ANALYSIS

- ✓ Timing
- ✓ Credibility
- ✓ Forecast Skill
- ✓ Potential Impacts



GOVERNMENT CAPACITY & OTHER RESPONSES  
 POTENTIAL FUNDING LANDSCAPE  
 CRISIS VISIBILITY  
 GAPS  
 POT STATUS

## 2. TIMELINESS

Is there enough lead time until the predicted peak of a hazard to implement crisis anticipation activities?

How do you balance forecast certainty with sufficient time to act?





**ALERT!**

## **ALERT 805: LOMBAZU (ANTICIPATION OF CHOLERA OUTBREAK)**

**!! 6 NGOs have raised an anticipation alert for cholera in Magulu, Lombazu !!**

AMOUNT REQUESTED: 300,000 GBP

POT BALANCE: 1,000,000 GBP

FORECASTED PEAK PERIOD: 1st July – 20th August 2024

OPTIMAL PERIOD FOR ANTICIPATORY ACTION: 24th June – 1st August 2024

DISTRICT TARGETED BY ALERT: **Magulu**

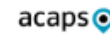
**ACTIVATE OR NOT ACTIVATE?**

# NAVIGATING UNCERTAINTY TO MAKE DECISIONS

- Just because there is uncertainty, it does not mean we can not make a decision.
- Be comfortable embracing the learning that will occur when dealing with uncertainty and should review past decisions for learning.
- Be guided by principles but utilize expert judgement – decisions should be based on shared expertise

**Reduce uncertainty by increasing knowledge and verifying information**

# TRIANGULATE INFORMATION: THIRD PARTY VERIFICATION



Anticipatory briefing note  
1 February 2022

## MADAGASCAR

### Tropical cyclone Batsirai

#### CRISIS IMPACT OVERVIEW

- Tropical cyclone Batsirai formed over on the 27<sup>th</sup> January and started moving west towards Mauritius, Réunion and Madagascar. As of 1<sup>st</sup> February 2022, tropical cyclone Batsirai is approaching Madagascar, and is expected to strengthen with winds up to 200km/h, and potentially make a landfall on the 5<sup>th</sup> February over the Vatovandri City area in central Madagascar. Heavy rains and winds are expected in eastern Madagascar between the 1<sup>st</sup> – 4<sup>th</sup> February ([CNN 01/02/2022](#); [ECHO 01/02/2022](#)).
- The eastern and central parts of the country were already affected by heavy rains, with 51 deaths and 130,000 affected people ([Express 29/01/2022](#)). On 17 January, heavy rains led to floods in the Analamanga region, affecting 8 districts in the Grand Tana division ([IFRC 26/02/2022](#); [Express 29/01/2022](#)). The rains increased when a tropical depression made landfall in the east of the country on the 22<sup>nd</sup> January, and evolved into tropical storm Ana on the 23<sup>rd</sup> January ([Disaster Charter 25/01/2022](#); [OCHA 24/01/2022](#)). 110,000 people were forced to leave their homes ([France Info 27/01/2022](#)). The heavy rains flooded 6800 houses ([Disaster Charter 25/01/2022](#)), and destroyed infrastructure, including the water intake structure of the treatment station in Ambohidratrimosome District ([UN News 25/01/2022](#)). Part of the national road connecting Antananarivo to Ambatondrazaka, in the east of the country was also destroyed, affecting transport in and out of Antananarivo ([OCHA 24/01/2022](#)). In the Analamanga region, the overflow of a river destroyed cropfields, caused landslides and destroyed the main roads ([CARE 28/01/2022](#)).

#### ANTICIPATED SCOPE AND SCALE

- Around 75% of the population in Madagascar are living below the poverty line ([World Bank 15/07/2021](#)). People who will be displaced by the cyclone are unlikely to have the resources needed to restore their homes and are likely to remain in shelter for months.
- The threat of landslides that has the potential of inflicting serious damage remains high for several weeks, even after the weather system ends depending on its strength ([IASC 13/02/2018](#)).

#### LESSON LEARNT

- It is important to inform communities within areas likely to be affected by the cyclone about pre-designated locations in higher lands where they can seek shelter ([IFRC 01/01/2016](#)).
- Malagasy governmental response capacity remains very limited. For previous storms, partnership with the private sector was essential in evacuation efforts ([IASC 13/02/2018](#)).
- In neighboring countries, the activation of the Early Action Protocol for floods allowed to anticipate an early response ([IFRC 26/01/2022](#)).

#### HUMANITARIAN CONSTRAINTS

- Only 26% of people in Madagascar have access to electricity ([World Bank 2020](#)), with only 2% of households in Atsimo-Atsinanana have electricity ([World Bank 07/2018](#)). That limits their ability to receive warning regarding cyclones, as well as limiting communication with affected population.
- Most areas likely to be hit by cyclones in Madagascar are isolated and only accessible by road 6 months per year (April-November). That increases the cost of aid delivery, and causes delays in access to information ([IASC 13/02/2018](#); [Logistics Cluster 11/2018](#)).
- As part of the government COVID-19 containment measures, the country closed its borders for international entry as of March 2020. While some exceptions have been granted to international humanitarian workers, some international aid workers are only granted non-renewable 3 months visas with considerable delays ([MSE 13/08/2021](#); [US Embassy 24/09/2021](#)).

Any questions? Please contact [info@acaps.org](mailto:info@acaps.org)

#### KEY PRIORITIES

179,000

PEOPLE TO BE POTENTIALLY AFFECTED

High

SHELTER NEEDS

High

RISK OF FOOD INSECURITY

#### NATIONAL RESPONSE CAPACITY

- National Office of Risk and Disaster Management (BNDRM)
- Malagasy Red Cross
- UNICEF

#### INTERNATIONAL RESPONSE CAPACITY

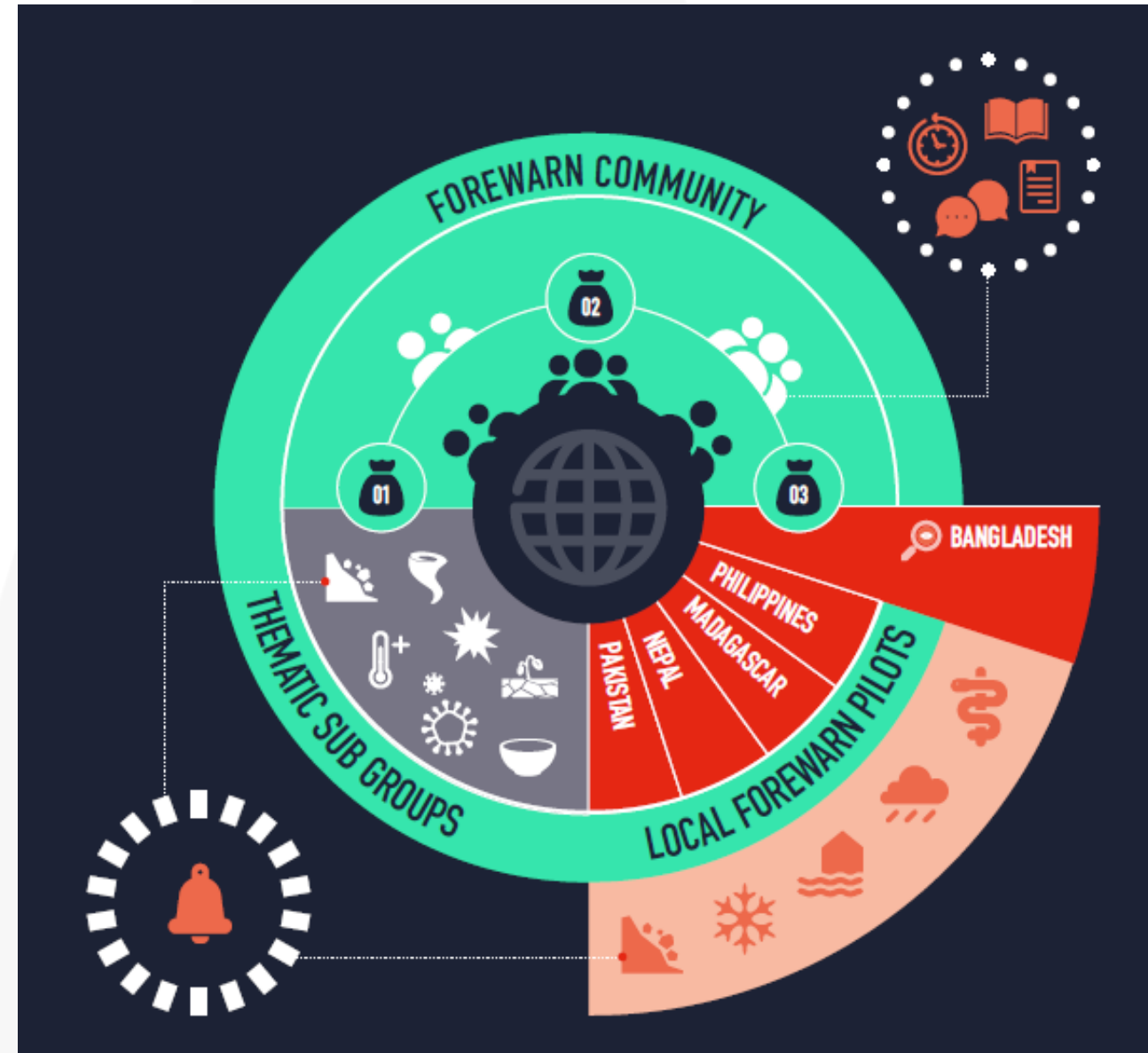
- International Federation of Red Cross (IFRC)
- MEDIAIR



# FOREWARN ADVISORIES

## Forecast-based, Warning, Analysis, and Response Network

- Bring together the right people to forecast hazards and support humanitarians closest to an anticipated crisis
- Partnerships to increase confidence in decision making



# BRIEFING NOTE: RISK OF CHOLERA IN MAGULU

Previous deadly cholera outbreaks in Lombazu have been linked with the **movement of people** to Magulu from Lomara islands and Taranzu for cultural and trade reasons

**Risk of flooding and tropical cyclones**, particularly in IDP camps and southern regions of the district. Flooding and storms can lead sewage overflows, creating environmental factors favourable to an increase in cholera bacteria

**Areas of congregation and populated environments** have increased risk of disease spread (e.g. IDP camps, markets, places of worship)

Global supplies of cholera vaccine are **critically low**, undermining response efforts in many other countries

# FOREWARN EXPERT INPUT

- "According studies, cholera cases can rise by as much as 25% with every 10mm increase or decrease in average rainfall levels".
- "In countries facing humanitarian crises, disease surveillance systems are frequently underdeveloped, making detection and prompt response to outbreaks difficult. Confirming cholera cases typically requires access to a laboratory, which may not be locally available in some countries. The time required for confirmation can delay response efforts, allowing outbreaks to spread unchecked".
- "The emergence of La Niña conditions this month is associated with higher cyclone activity and rainfall in regions of Lombazu like Magulu. Multiple seasonal forecasts also indicate the high likelihood of cyclones and heavy rainfall. Nearer term forecasts suggest heavy rainfall is probable in Magulu in July".
- "Myths around risk perception of disease within affected communities is a key challenge in Lombazu"

# KEY TAKEAWAYS

There are alternatives to trigger-based funding mechanisms - flexible, dynamic, collectively-owned

Having access to the right information is key to decision-making

The value of **multi-sectoral collaboration** for decision making about allocating humanitarian financing in anticipation

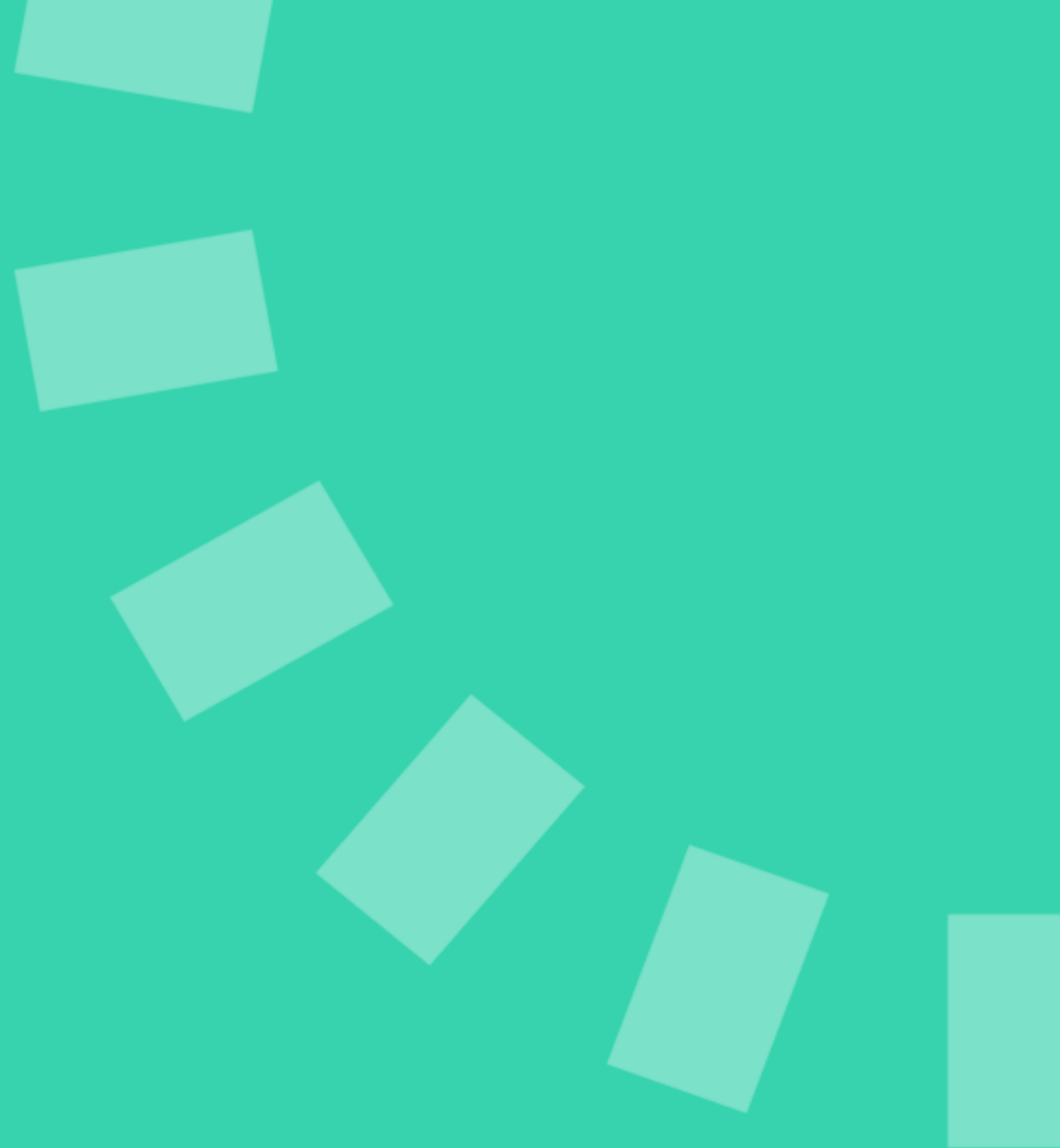
[Interested in getting involved? FOREWARN@startprogrammes.org](mailto:FOREWARN@startprogrammes.org)



# THANK YOU

[anticipation@startprogrammes.org](mailto:anticipation@startprogrammes.org)

[FOREWARN@startprogrammes.org](mailto:FOREWARN@startprogrammes.org)





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UNDERSTANDING RISK  
GLOBAL FORUM 2024

TRADITION • INNOVATION • RESILIENCE

## 4.2. Financing Innovation across a People-centred Resilience Agenda

### Speakers:

John Harding

Kimberly Brown

Lisa Robinson

Rashmin Gunasekera

# WORLD CAFÉ (30')

- **Join a group at a station**
- **Share your thoughts, insights, and experience with your group.**
- **Move to the next station!**

- **What is innovation in resilience and people-centered early warning projects?**
- **How can innovation be replicated and scaled up?**
- **What are the next steps to progress a workstream on innovation?**



# TAKEAWAYS



- **WHAT IS INNOVATION IN RESILIENCE AND PEOPLE-CENTERED EARLY WARNING PROJECTS?**
- **WHAT ARE THE NEXT STEPS TO PROGRESS A WORKSTREAM ON INNOVATION?**
- **HOW CAN INNOVATION BE REPLICATED AND SCALED UP?**





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UNDERSTANDING RISK  
GLOBAL FORUM 2024

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## 4.3. Looking to 2030: *Where do we go from here?*

**Speakers:**

Erin McAuliffe, Risk-informed Early Action Partnership (REAP)

## Activity: Identifying gaps and opportunities (30 mins)

1. REAP's target is 1 billion more people covered by early warning systems, finance mechanisms and policies to support EA. At your tables, discuss:

***What do we as a community need to do in the next 5-10 years to achieve this goal?***

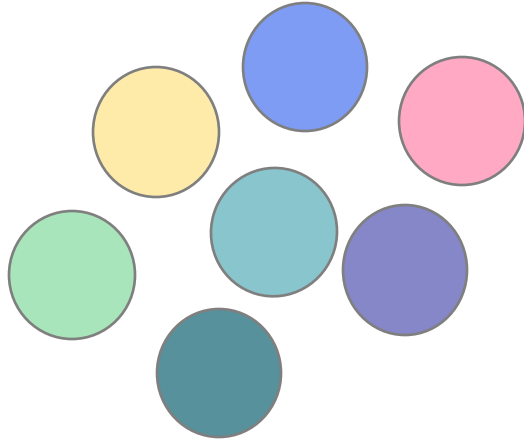
2. Capture your ideas and thoughts on post it notes (approx. 15-20 mins)

*One idea per post it note  
Standalone (phrases, not single words)  
Legible to others*

3. Cluster similar themes together for report back (approx. 10-15 mins)



## Activity: Priorities for the future of EA/EW (10 mins)



**1.** Take your pack of 7 dots.

**2.** Move around the stations and read as many of the contributions as you can.

**3.** Vote with your dot stickers for ideas or areas you think are priorities for our collective attention and action.

# Tell us about your experience!

## List of challenges and gaps

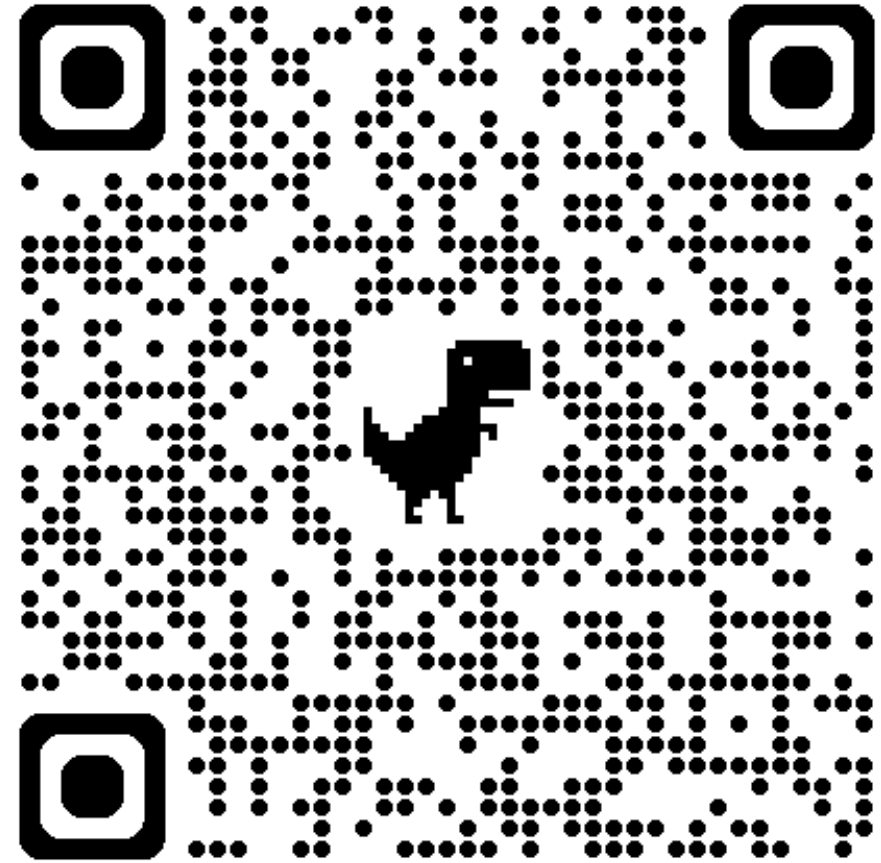
in attempting to build or strengthen early warning systems or early/anticipatory action protocols. This can be on any of the themes covered during the day (forecasting, inclusion, conflict environment and financing) or others.

## Solutions

to overcome any of these challenges, whether they are more traditional (building on existing systems), innovative (disruptive approaches) or resilient (focused on sustaining the approach over time).

## List of resources / guides / research

that have been helpful in addressing your challenges.





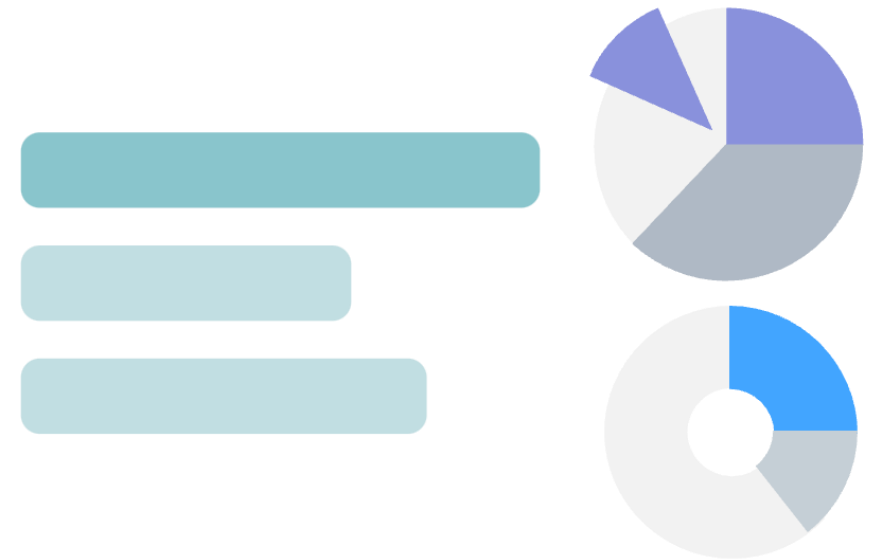
# Rapid report back (5 mins)

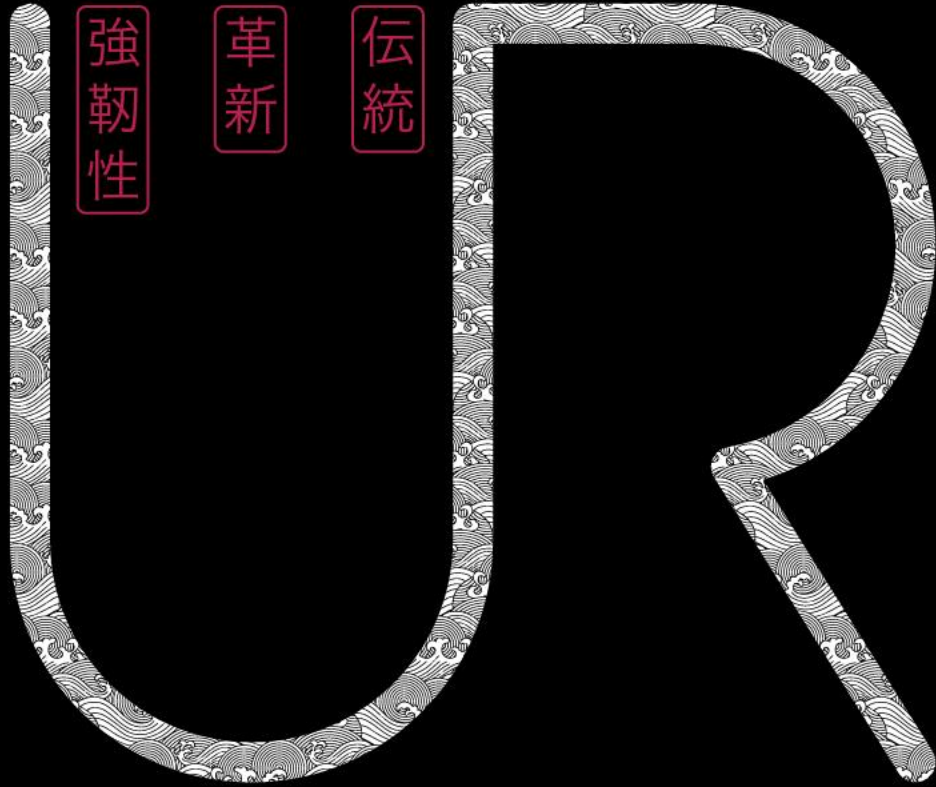
## ***Where is the energy in the room?***

- *Across themes*
- *Within themes*

## ***Is there consensus on priorities or not?***

- *Where do we agree?*
- *Where do we diverge?*





# Recap of the day

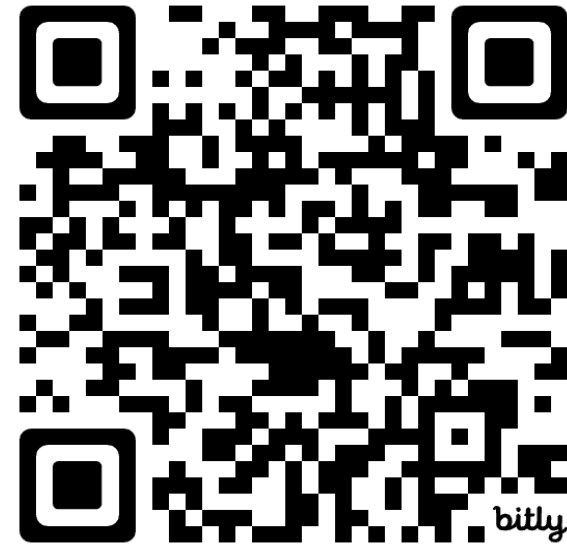
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*Want to share more about  
the future of EW/EA?*

*Take our 3-question survey!*

Or sign up to our mailing list to get regular  
updates on the REAP Post-2025 process:  
[bit.ly/reap2025](https://bit.ly/reap2025)



<https://bit.ly/reap2025survey>