CPA SMALL BRANCHES
Empowering Small Parliaments and Legislatures to Tackle Big Challenges

DISASTER RISK MANAGEMENT
IN SMALL JURISDICTIONS
WORKSHOP

REPORT

24 - 26 MAY 2023
GUILDHALL, LONDON,
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ABOUT THE CPA

The Commonwealth Parliamentary Association (CPA) connects, develops, promotes and supports parliamentarians and their staff to identify benchmarks of good governance and the implementation of the enduring values of the Commonwealth. The CPA collaborates with parliaments and other organisations, including the intergovernmental community, to achieve its statement of purpose. It brings parliamentarians and parliamentary staff together to exchange ideas among themselves and with experts in various fields, to identify benchmarks of good practices and new policy options they can adopt or adapt in the governance of their societies.

To learn more, visit our website here. [www.cpahq.org](http://www.cpahq.org)

CPA Small Branches

Established in 1981, the network represents Commonwealth jurisdictions with populations under 1 million and operates within the framework of the CPA. The CPA Small Branches network seeks to “empower small parliaments to overcome national and global challenges through cooperation, advocacy and the strengthening of parliamentary democracy and good governance”. Find out more here: [https://www.cpahq.org/our-networks/cpa-small-branches/](https://www.cpahq.org/our-networks/cpa-small-branches/)

ABOUT THE AUTHOR

About the authors

This document was produced by Jack Hardcastle, Programmes Manager at the CPA Secretariat.

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From 24-26 May 2023, the Commonwealth Parliamentary Association (CPA) Small Branches Network, in collaboration with the Institute of Hazard, Risk and Resilience, Durham University, successfully conducted a three-day workshop on Disaster Risk Management in Small Jurisdictions. The workshop, hosted at the Guildhall, City of London, was attended by 22 parliamentarians from the CPA's Small Branches, along with other relevant policy and research stakeholders.

The workshop served as a platform for knowledge exchange and collaboration among parliamentarians and stakeholders. The sessions were centred around democratic accountability, cross-jurisdiction collaboration and support, resource mobilisation, and the crucial role of accurate and timely data and research in disaster risk management. The workshop featured presentations and discussions led by experts in the area of disaster risk management and parliamentarians, as well as interactive sessions and group exercises to foster knowledge sharing and collaboration.

By the end of the workshop, participants had enhanced their understanding of disaster risk management, particularly in the context of their own communities and jurisdictions. They learned about best practices and case studies, discussed challenges and opportunities, and discussed strategies and action plans for effective disaster risk management in their respective jurisdictions. Importantly, they also established and strengthened networks and partnerships with other parliamentarians and stakeholders present.

This workshop was part of the CPA's longstanding commitment to supporting small jurisdictions through its Small Branches Network. In August 2022, the Small Branches Network had held a workshop on disaster risk preparedness during the 65th Commonwealth Parliamentary Conference in Halifax, Canada. Climate change and the environment have also been identified as a thematic priority in the CPA Strategic Plan 2022 – 2025, recognising the urgent need to address the impacts of climate change, particularly on vulnerable communities.
WORKSHOP SPEAKERS

Experts

Dr Flora Cornish
London School of Economics

Experience:
► Associate Professor in the Department of Methodology at the London School of Economics & Political Science and co-founder of the After Disasters Network. Her research uses qualitative and participatory methods to advance understandings of the role of community action in disaster response and the interface between affected communities and official responses.

Prof Louise Bracken
Northumbria University

Experience:
► Appointed to the post of Pro Vice-Chancellor at Northumbria in August 2021. Before joining Northumbria University Louise was the Deputy Vice Provost (Research) (DVPR) at Durham University.
► In 2015, appointed as the Executive Director of the Institute of Hazard, Risk and Resilience (IHRR) and the Wilson Chair of Hazard, Risk and Resilience.
► Interdisciplinary researcher specialising in the science of fluvial geomorphology, flooding, and managing hazard and risk.
► Published over 80 articles, been principle and co-investigator on over £25M of research grants and has supervised over 25 postgraduate students to successful completion.

Dr Julia Pearce
King’s College London

Experience:
► Reader in Social Psychology & Security Studies and Associate Dean for Impact & Innovation in the Faculty of Social Science & Public Policy and Director for Students & Culture in the Department of War Studies at King’s College London.
► Chartered Member of the British Psychological Society and an Honorary Public Health Academic Consultant at the UK Health Security Agency.
► Deputy Chair of the UK Cabinet Office National Risk Assessment Behavioural Science Expert Group.

Dr Sim Reaney
Durham University

Experience:
► Associate Professor in the Department of Geography and the Co-Director of the Institute of Hazard, Risk and Resilience at Durham University, UK.
► Research integrates geospatial analysis and simulation modelling with novel field measurements to enable new insights into catchment hydrological functioning and new approaches to managing the environment.
WORKSHOP SPEAKERS

Prof Brooke Rogers OBE
King’s College London

Experience:
► Professor of Behavioural Science and Security and Vice-Dean (People & Planning) of the Faculty of Social Science & Public Policy (SSPP) at King’s College London (KCL).
► Chairs the Home Office Science Advisory Council (HOSAC), leading a recent restructure to enhance the diversity of skills and voices contributing to, and transparency of scientific input into the HO science ecosystem.
► Independent participant in the UK’s Science Advisory Group for Emergencies (SAGE), co-chair of SAGE’s behavioural science sub-group (SPI-B), and a member of the Welsh government Technical Advisory Group during the COVID-19 pandemic.

Mr Neil Denton
After Disasters Network

Experience:
► Independent Community Mediator and a Professor in Practice with the After Disasters Network, specialising in conflict transformation.
► Helps communities in conflict to find ways to reduce violence, increase justice, solve real life problems and strengthen human relationships.
► Works to find ways that place communities at the heart of thinking and doing, and to explore and demonstrate how the principles and practices of conflict transformation can be beneficial to disaster prevention, response and recovery.

Dr Carly Beckerman
Durham University

Experience:
► Associate Professor in the School of Government and International Affairs at Durham University and Co-Director of the Institute of Hazard, Risk and Resilience. She
► Specialises in political psychology and foreign policy analysis.

Prof Kate Cochrane
Durham University, NHS Highlands

Experience:
► Head of Resilience for NHS Highland.
► Professor in Practice within the Durham University’s Institute of Hazard, Risk and Resilience and is one of the founders of the After Disasters Network.
► Emergency Planning Manager supporting the Falkland Islands Government in their response to Covid.
► Developed the first multi-agency Concept of Operations that was designed to support the immediate rescue and longer term response available to adults and children who have been trafficked into and around the UK.
WORKSHOP SPEAKERS

Parliamentarians

Joy Burch MLA  
Speaker, ACT Legislative Assembly

**Experience:**
- CPA Small Branches Chairperson.
- 2016, elected as Speaker of the ACT Legislative Assembly, and elected as Speaker again in 2020.
- Chairs the ACT Legislative Assembly Administration and Procedure Committee.
- In 2009, appointed to the ACT Cabinet, was Minister responsible for Ageing, Arts, Children and Youth, Disability, Community Services, Education, Gaming and Racing, Housing, Multicultural Affairs, Police and Emergency Services, and Women.

Lord Fakafanua  
Speaker, Legislative Assembly of Tonga

**Experience:**
- 2017 - Current: Re-elected as Speaker of the House, Legislative Assembly of Tonga
- 2012 - 2014: Re-elected into Parliament as a Noble Representative and also elected as the Youngest Speaker in Parliament
- 2009 - 2014: Elected into Parliament as Noble Representative

Hon. Speaker Arun Kumar Upreti  
Speaker, Sikkim Legislative Assembly

**Experience:**
- Speaker, Sikkim Legislative Assembly, India.
- Honourable Minister of State - Urban Development Department and Food and Civil Supplies Department - Government of Sikkim.
- 2019 - 2022 - Elected as Member of Legislative Assembly.

Hon. Sir Alden McLaughlin MBE MP  
Parliament of the Cayman Islands

**Experience:**
- 2021- Present - Opposition Member and Shadow Minister for Financial Services, International Trade and Development, Health, and Agriculture.
- In January 2022, he was appointed Knight Commander of the Order of St Michael and St George.
WORKSHOP SPEAKERS

**Hon. Jovesa Vocea MP**
Parliament of Fiji

**Experience:**
- Assistant Minister for Ministry of Rural and Maritime Development & National Disaster Management Office of Fiji.
- Member of the Standing Committee on Foreign Affairs and Defense.

**Hon. Willin Antoni Belliard MHA**
House of Assembly, Turks and Caicos Islands

**Experience:**
- March 2021 - Present - Member of Appropriation Committee.
- March 2021 - Present - Member of Privileges Committee.
- March 2021 - Present - Member of the House Committee.

**Mr Peter Greenhill MLC**
Tynwald, Parliament of the Isle of Man

**Experience:**
- Member of the Legislative Council 2020 to date.
- Member of the Department for Enterprise March 2020 to date.
- Vice-Chair Manx Utilities 2020 to date.
- Member of the Standing Committee on the Business and Functioning of the Council 2020 to date.
- Committees of Tynwald: Member of the Select Committee on the Business and Functioning of the Council 2020-2020.

**Mr Rob Mercer MLC**
Tynwald, Parliament of the Isle of Man

**Experience:**
- Member of the Legislative Council 2020-date.
- Member of the Department of Home Affairs 2022-date.
- Member of the Public Accounts Committee 2021-date.
- Vice-Chair of the Public Services Commission 2021-date.
- Chair of the Environment and Infrastructure Policy Review Committee 2021-date.
- Employer representative of the Public Sector Pensions Authority 2021-date.
- Member of the Standing Committee on the Business and Functioning of the Council 2020-date.
This section of the Report provides a summary of the Workshop, capturing key findings from each of the sessions.

Session 1: Risk, Resilience & Communities

Understanding Community Vulnerabilities and Capacities in Disasters

Definitions

- **Disaster** – an emergency that causes significant damage or loss of life.
- **Emergency** – something serious, unexpected and dangerous that needs immediate action.
- **Hazard** – something that could cause harm.
- **Recovery** – after the emergency response stops
- **Resilience** – capacity of a system to adapt to a hazard, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure.
- **Risk** – combination of the chance that a hazard will cause harm and how serious the harm could be.

There exist a range of key factors and concepts that contribute to community vulnerabilities during disasters, such as poverty, relative inequalities, and health disparities. Additionally, the concept of community capacity and the significance of comprehending and harnessing local capacity and resources requires consideration.

Addressing the impact of poverty on disaster vulnerability is crucial as they compound the challenges faced by communities during disasters. Poverty, being the leading factor in determining a community’s disaster vulnerability, restricts access to vital resources, infrastructure, and services, while also hindering preparedness efforts, leaving individuals and communities more exposed to the adverse effects of disasters. This compounding effect of poverty and vulnerability underscores the need for targeted interventions to break the cycle and enhance resilience within communities.
**Vulnerability:**
The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

**Capacity:**
The combination of all the strengths, attributes and resources available within an organisation, community or society to manage and reduce disaster risks and strengthen resilience.

*Capacity may include infrastructure, institutions, human knowledge and skills, and collective attributes such as social relationships, leadership and management.*

Relative inequalities within communities from age extremes, rural and urban communities, gender, education, disabilities, race and employment rates, among others, can intensify vulnerabilities during disasters. And understanding these relative inequalities is essential for developing effective disaster risk management strategies that address the specific needs of marginalised and disadvantaged groups.

Leveraging local capacities, resources, and strengths is a key tool in enhancing disaster resilience. Understanding community capacities involves identifying and harnessing existing community networks, community organisations, educational institutions, local businesses and individual skillsets. By empowering communities and involving them in decision-making processes, disaster management efforts can be more effective and sustainable. Through their close ties with constituents, particularly in small jurisdictions, parliamentarians can bridge the gap between communities and government, advocating for their needs and priorities, and ensuring that disaster resilience strategies are tailored to address local challenges.

In terms of practical steps to understanding community capacities, various approaches exist such as community mapping of resources and assets, to gather information about local strengths and resources. The importance of engaging community members as active participants in disaster risk management plans also helps foster a sense of ownership and empowerment, as well as being an essential tool for building sustainable solutions. The below infographic details some of the considerations that parliamentarians from small jurisdictions, and other relevant stakeholders, can consider when mapping out community vulnerabilities.
Asset Mapping - Understanding Community Vulnerabilities

▸ **Types of hazards that communities live with**: What specific types of hazards communities are prone to? These included natural disasters such as floods, earthquakes, hurricanes, or wildfires, as well as human-made hazards like industrial accidents or transportation-related incidents. Understanding the specific hazards in each community is crucial for creating tailored assessments and preparedness plans.

▸ **People and communities who are particularly at risk**: What individuals and communities are particularly vulnerable to the impact of disasters? These could include low-income households, elderly individuals, persons with disabilities, marginalised groups, or those living in geographically exposed areas. Recognising vulnerable populations can help prioritise efforts to address vulnerabilities and ensure equitable disaster risk management.

▸ **Local organisations who could help during and after a disaster**: It is important to map out local organisations, such as community-based organisations, NGOs, faith-based groups, or volunteer networks, that could provide assistance and support during and after a disaster. This can help leverage networks and resources within the community and establish partnerships to enhance resilience and response capabilities.

▸ **Current levels of engagement**: It is important to assess current levels of community engagement in disaster risk management. To what extent are community members involved in decision-making processes and response efforts? This evaluation can help identify existing strengths as well as gaps in community engagement.

▸ **Challenges of working with communities**: What current challenges exist when working with communities in the context of disaster risk management? This may include limited resources, lack of awareness and preparedness, cultural or language barriers, or distrust of authorities. This is pertinent for parliamentarians, who as community leaders, must navigate the challenges of rebuilding trust and credibility with their constituents, especially in times of crisis. By recognising these challenges, tailored approaches can be developed that prioritise transparency, foster engagement and overcome barriers.
Session 2: Democracy & Disasters

Maintaining Democratic Processes during Disasters

The relationship between democracy and disaster management is significant, grounded in three important reasons: Firstly, it is about people’s fundamental right to be informed, involved, and represented during and after disasters (**intrinsic rationale**). Secondly, democracy serves as a means to promote disaster risk management through information, transparency, and participation (**instrumental rationale**). Lastly, democracy fosters the development of ideas and alternatives for disaster risk management through open dialogue (**constructive rationale**). This connection is particularly relevant for parliamentarians, who play a key role in upholding democratic principles and ensuring that communities have a voice in disaster management and recovery processes.

**DEMOCRACY-DISASTER INTERPLAY: KEY RATIONALES**

- **INTRINSIC RATIONALE**: People’s inherent right to know, participate and be represented during and after disasters.
- **INSTRUMENTAL RATIONALE**: Information, transparency and participation as a vehicle for DRR and disaster recovery.
- **CONSTRUCTIVE RATIONALE**: Developing ideas and alternatives to DRR and recovery through dialogue and deliberation.

Empirical evidence highlights the significance of democracy within disaster management in two key aspects. Firstly, democratic governance can serve as a safeguard during disasters by promoting transparency, accountability, and the protection of human rights. Democratic channels such as media and civil society can also act as “alert systems,” disseminating crucial information, raising awareness, and mobilising communities to respond effectively. Secondly, disasters can serve as catalysts for increased democratic engagement, as they often prompt communities to demand more transparency, accountability, and participation in decision-making processes. This can be reflected in increased civic engagement and activism, leading to changes in legislation, policies, and the allocation of resources to address the needs and concerns of the affected communities.
As representatives of the people, parliamentarians play a key role in facilitating democratic responses, including fostering citizen involvement during and after disasters. For example, after a disaster, parliamentarians can lead community outreach efforts to gather feedback, identify gaps in disaster response, and propose legislation to strengthen disaster management policies and frameworks. They can also use their platform to raise awareness about disaster risk and promote measures to reduce vulnerability.

There are a range of contemporary approaches and mechanisms that can help to maintain democracy during and after disasters:

► Government inquiries and parliamentary hearings are conducted to scrutinise disaster response efforts, identify shortcomings, and propose reforms.

► Campaigns by political parties or activists provide checks and balances on the government’s actions, ensuring accountability and highlighting alternative perspectives.

► Survivor and family campaigns amplify the voices of those affected by disasters, advocating for justice, support, and systemic changes.

► Civil society campaigns mobilise grassroots movements, fostering community-led initiatives, and demanding inclusive approaches to disaster management.

► Investigative reporting by the media exposes any negligence or corruption, holding authorities accountable.

► Legal investigations and interventions by NGOs ensure that legal frameworks align with democratic principles and safeguard human rights in the context of disasters.

► Supreme Audit Institutions to conduct independent audits to ensure transparency, accountability, and efficient use of public resources during and after disasters.
Case Study: Disaster Management in the Kingdom of Tonga

Overview
In early 2022, the Kingdom of Tonga, faced a series of catastrophic events that tested its disaster management capabilities. This case study examines the response and recovery efforts following a volcanic eruption, tsunami, and the outbreak of COVID-19.

The Disasters
On January 15, 2022, the Hunga Tonga-Hunga Ha’apai volcano erupted, causing a devastating tsunami and a thick blanket of ashfall to cover the entire island group. This disaster was followed by the first recorded community transmission of COVID-19 on February 1, 2022.

The Impact
Tonga, already ranked as the third most at-risk nation for disasters according to the World Risk Index Report 2021, was severely impacted. The volcanic eruption and subsequent tsunami directly affected 84% of the total population - it displaced over 2,300 people, damaged 299 homes and a death toll of 4. The disasters also caused significant damage to infrastructure, including a 100% disruption of telecommunications. The initial estimated loss in GDP was USD 182 million.

The Response
The government activated its “cluster” system three days after the eruption and declared a national State of Emergency the following day. Search and rescue teams were sent to outer islands, and schools were closed. The government also drew down the National Emergency Fund (NEF) to fund urgent repairs and announced a $565 million recovery plan for housing, food, livelihood, and tourism. In addition to the government’s efforts, international humanitarian relief supplies were received from countries including Australia, New Zealand, China, USA, France, Fiji, Japan, and the UK. Local and international NGOs also played a significant role in the relief efforts.

Parliamentary Response
The Tongan Parliament faced challenges due to the Speaker being stranded abroad and COVID-19 restrictions. Despite this, all Members of Parliament joined recovery efforts, addressing the basic needs of their constituents. The Parliament also scrutinised national commitments to disaster risk reduction strategies and ensured inclusive participation in recovery efforts. Legislation, including the Emergency Management Act 2007 and the Tonga Climate Change Fund Act, guided the parliamentary response. However, obstacles such as political challenges and a lack of data posed challenges to these efforts.

Lessons Learned
The disasters highlighted the importance of having a well-developed Disaster Risk Management framework. However, the events also exposed weaknesses, such as the lack of plans for key infrastructure, delays in responses to outer islands, and the absence of a displacement policy. The need for public awareness and education was also emphasised.

Tonga’s experience underscores the importance of preparedness, quick response, and effective recovery strategies in managing disasters. It also highlights the role of international cooperation and the need for robust policies to mitigate the impacts of such events.
In disaster risk management, effective decision-making is crucial, but it presents challenges for stakeholders, including parliamentarians, organisations, and governments. Certain natural tendencies and biases in human decision-making may lead to less-than-optimal outcomes and potential errors. Some common challenges include focusing on specific aspects of a situation without considering the bigger picture, settling for satisfactory solutions instead of seeking the best option, and being influenced by the order in which information is presented. Additionally, cognitive biases can occur from the tendency to take mental shortcuts and simplify complex information, often deviating from more rational or objective assessments.

To make better decisions, it’s essential to be aware of these challenges and biases and consider diverse perspectives. For parliamentarians, understanding these decision-making challenges is vital, as they often play a crucial role in providing leadership and setting the direction of disaster risk management processes and policies. By recognising these tendencies and biases, parliamentarians can more actively promote transparent and effective decision-making processes that best serve their communities.

There are a number of ways that parliamentarians could apply their understanding of decision-making challenges to their work on disaster risk management and response. This could include:

► When allocating funding for disaster risk or response, parliamentarians can consider the broader context and long-term implications of any decisions, avoiding a narrow focus on just immediate short-term solutions (nonholistic thinking). For example, they may assess the potential environmental impact of an infrastructure project designed to mitigate against future disasters.

► In time and resource-constrained situations during a disaster, parliamentarians may need to make quick decisions. However, they should still strive to achieve the most optimal outcome for their constituents, even within the time limitations (to avoid satisficing). This could mean prioritising essential services and relief without compromising long-term recovery efforts.

► To overcome confirmation bias, parliamentarians can actively seek diverse perspectives and information, even those that challenge pre-existing beliefs or opinions. By doing so, they can ensure that their decisions are based on a comprehensive and objective understanding of the situation and not by selective information.
In the context of post-disaster scenarios, decision-making processes often undergo significant changes due to shortened chains of command and time-frames. The convenience of executive decision-making may become more prominent, potentially leading to a tension with principles of democratic governance. It is crucial not to sideline parliaments during such crises, as they play a vital role in upholding democratic governance and representing the interests of the affected communities. For example, in the aftermath of a hurricane, when rapid decision-making is necessary to provide emergency relief and support, parliaments can play a vital role in approving necessary funds, emergency measures, and providing oversight and scrutiny of government actions.

Furthermore, affected communities, having experienced a world torn apart by the disaster, may harbor a sense of distrust towards authorities and institutions. It is essential to recognise that decisions made during the immediate response phase can have far-reaching consequences for long-term recovery efforts, highlighting the significance of effective decision-making. Again, by including parliaments in these processes, disaster management efforts can benefit from diverse perspectives, and local knowledge, ensuring that decisions made are grounded in realistic assessments of community needs and priorities, as well as helping to increase public trust. It is also essential to think beyond immediate urgencies and consider the long-term implications of decisions made, as this approach ultimately pays off in building resilience and sustainable recovery.

**Definitions**

*Some of the more technical terms used when examining the tendencies and biases that impact human decision-making:*

- **Nonholistic thinking** - Focusing on only one aspect of a situation and not considering the bigger picture.

- **Dimension-based thinking** - Limiting decisions to specific criteria without considering how everything is connected.

- **Satisficing** - Settling for satisfactory solutions instead of seeking the best option due to time constraints or other limitations.

- **Order sensitivity** - The way information is presented can influence decisions, leading to different outcomes based on the sequence.

- **Confirmation bias** - Seeking and interpreting information that confirms pre-existing beliefs.

- **Motivated avoidance** - Avoiding or dismissing information that challenges existing beliefs.

- **Groupthink** - Prioritising consensus and conformity over critical evaluation and alternative viewpoints.
Assessing risk is a crucial step in the process of disaster management, as it allows us to understand the complexities and interactions involved. Disasters rarely occur in isolation; they are connected to various factors and have multifaceted impacts. Engaging in risk assessments involves navigating emotionally charged discussions and handling politically sensitive matters. It requires a comprehensive understanding of the interconnections between infrastructure, the social fabric of communities, and the strength of community connections. It is important to ensure that the voices of all stakeholders are heard, as sometimes the loudest voices tend to dominate the conversation. By conducting comprehensive risk assessments, a better understanding of the potential risks associated with disasters is gained, thus facilitating more proactive steps to mitigate these risks, enhance resilience, and build stronger and more prepared communities.

A Risk Matrix diagram provides a visual representation of potential risks, considering their impact and likelihood, aiding in decision-making process during disaster management:
The Emergency/Disaster Timeline

► **Pre-disaster phase**: this includes risk assessments, contingency planning, and community engagement to enhance resilience. Here the use of early warning systems, public awareness campaigns, and capacity-building initiatives can ensure that communities are better prepared to cope with impending disasters.

► **Early warning and preparedness**: this includes the implementation of early warning systems, public awareness campaigns, and capacity-building initiatives to ensure timely response and reduce the impact of disasters, empowering communities to take proactive measures and make informed decisions to protect themselves.

► **Onset of the disaster**: this includes the activation of emergency response plans, immediate mobilisation of emergency services, search and rescue operations, and medical assistance to provide critical support - prioritising the safety and well-being of affected individuals and communities.

► **Acute response phase**: this includes the distribution of essential supplies, coordination of emergency operations, and information dissemination to keep affected communities informed and provide timely assistance, fostering a sense of support and stability.

► **Transition to recovery**: this includes the assessment of damages, beginning rehabilitation efforts, and identification of long-term recovery needs to lay the foundation for rebuilding and restoration, enabling affected communities to start rebuilding their lives and infrastructure.

► **Recovery phase**: this includes rebuilding and reconstruction of infrastructure, restoration of services, and support for affected communities in resuming normalcy, fostering a sense of resilience as communities recover.

► **Long-term rehabilitation**: this includes continuous monitoring, evaluation, and adaptation to address ongoing challenges, ensuring sustained recovery and preparedness for future events. Fostering learning and improvement in disaster management practices going forward.

► **Mitigation and preparedness for future disasters**: this includes implementing measures to minimise future risks, enhancing community preparedness, and fostering sustainable development practices to build resilience and reduce vulnerabilities within communities.

*It is important to note that the timeline and actions in each phase may vary depending on the specific circumstances of the disaster and the different types of strategies used. Flexibility and the ability to adapt are key to effectively manage emergencies and disasters.*
Recovery After Emergencies

Recovery is both a complex and highly challenging phase following disasters or emergencies. The term “recovery” itself can also be problematic. It is used throughout the disaster and emergency planning process and can refer both to the immediate and longer-term responses, including saving lives and rebuilding communities. However, it can be viewed and interpreted differently by those whose lives have been affected and may not fully capture the ongoing grief and trauma experienced by individuals and communities, even after “recovery” and response efforts are well under way. Therefore, there is an imperative to use the term “recovery” with both care and sensitivity.

It is also important to recognize the range of impacts of disasters on people’s lives, affecting their homes, workplaces, physical and emotional well-being, and sense of safety and security. The objective of the recovery phase is to stabilize the situation, assess the impact and community needs, and deliver programmes that support development.

Particular focus must also be placed on the early decisions made during the response phase. Given the time pressure, limited information, and high emotional intensity, there is often little time to consider the longer-term impacts of these decisions. Unintended consequences may arise, potentially exacerbating the harm experienced by individuals and communities. To mitigate these risks, there is a need for a risk assessment process that informs recovery planning, addressing known response gaps and fostering connections with communities. By proactively considering these factors, recovery efforts can be more responsive, inclusive, and effective in meeting the needs of those affected by emergencies.

**TYPICAL PHASE OF A DISASTER**

![Typical Phase of a Disaster Diagram](samhsa.gov)
Session 4: Feeling Safe, Being Safe

Risk perception and community resilience

Risk communication is the process of conveying information about risks, hazards, and disasters in a clear and effective manner. It includes using various communication channels and strategies to reach people and address their specific needs. This could include public health alerts, educational campaigns, public service announcements (PSAs) or crisis communication, among others. Risk communication is important because it plays a crucial role in promoting understanding, awareness, and preparedness among individuals and communities. It helps people make informed decisions, take appropriate actions to protect themselves and their communities, and foster trust in authorities and institutions.

Whereas risk communication informs people about potential risks, risk perception refers to how individuals subjectively see these risks. Understanding public risk perception is crucial for tailoring effective risk communication and aligning messages with public concerns. Risk perception can affect behaviour during a crisis, impacting physical and emotional health and studies have shown that in many cases, particularly for high-impact risks, governments may not fully understand the public’s expectations or their tolerance for risks. Effective risk communication reduces negative crisis impacts by addressing public the public’s perception of risk, providing accurate information, encouraging protective actions, and maintaining public trust. Tailoring messages supports communities in dealing with crises and building resilience.

EXPERT VS PUBLIC PERCEPTIONS OF RISK

Understanding the difference between experts and publics perception of risk is important when designing effective risk communication. Experts focus on technical aspects like cause and effect, while the public’s perceptions are shaped by concepts like emotions and fairness:

**Expert perceptions of risk**
- Can I identify a cause and effect relationship?
- Can I measure the amount of harm?
- Does past experience suggest a hazard?
- Is there a possibility of an accident?
- Is there possible exposure to the risk like pollution or violence?
- Is there evidence of damage?

**Public perceptions of risk**
- Is the risk familiar or unfamiliar?
- Is the risk unknown, with delayed effects?
- Is there control over the risk or lack of it?
- Is the risk fair or not fair?
- Is the risk natural or technological?
- Does the risk have potential catastrophic consequences or become out of control?
Parliamentarians play a vital role in risk communication as they act as representatives of the people and are closely connected to their constituents. They have the opportunity to effectively communicate risk-related information to their communities and ensure that the right messages reach the right people. By engaging with their constituents and understanding their unique needs and concerns, parliamentarians can tailor risk communication strategies that resonate with the local population. Additionally, they can advocate for the allocation of resources towards risk communication efforts, such as supporting educational campaigns, and ensuring that any public health alerts are shared promptly.

Supporting Diverse Communities

In the context of emergencies, certain groups are often more vulnerable due to various factors such as age, health status, socioeconomic conditions, and more. For example, older people may be more susceptible to certain diseases or may have difficulty evacuating during a disaster due to mobility issues. Similarly, individuals with mental impairments may have difficulty understanding or responding to emergency instructions. Minority language speakers and tourists might face communication barriers. Understanding these vulnerabilities is crucial for effective disaster risk management as it allows for the development of targeted strategies to support these groups.

The term ‘vulnerable’ is often used in a broad sense to describe groups that are at a higher risk during emergencies. However, not everyone who falls into these groups may identify with this label. This could be due to a variety of reasons, including a desire to maintain autonomy and dignity, or a belief that they have the resources to cope with emergencies. This mismatch between perceived and actual vulnerability can pose challenges for emergency and disaster management, as people who do not identify as vulnerable may not listen to warnings or take advantage of support.

Effective communication is crucial during a crisis. However, one-size-fits-all messages may not resonate with or reach all segments of the population. Therefore, it’s important to tailor communications to the needs and characteristics of different groups. For instance, messages may need to be translated into different languages or adapted for those with impairments. The COVID-19 pandemic highlighted the importance of this, with tailored communications strategies being used to address vaccine hesitancy among certain groups.
Case Study: COVID-19 Vaccine Comms Project Overview

**Project Overview**
► The “COVID-19 Vaccine Comms Project” was an 18-month project (March 2021 - September 2022) conducted in partnership with Dr. Atiya Kamal (Birmingham City University) and the UK Health Security Agency (UKHSA). The project aimed to understand the impact of public health communications on the experiences and beliefs about COVID-19 vaccinations among minority ethnic groups in the UK. The project was funded by the Economic and Social Research Council (ESRC), as part of UK Research and Innovation’s rapid response to COVID-19.

**Background**
► The project was initiated in response to the disproportionate impact of COVID-19 on minority ethnic groups in the UK. Factors such as age, poverty, and ethnicity were identified as risk factors. The project also aimed to address vaccine hesitancy, defined as a delay in acceptance of a vaccine when vaccinations are available.

**Methodology**
► The project involved a rapid literature review of factors influencing COVID-19 vaccination uptake in minority ethnic groups. It also conducted three waves of in-depth interviews and focus groups with local public health and community organisations, and residents from diverse communities in London and Birmingham. The discussions explored barriers and facilitators of vaccination uptake, changes in COVID-19 risk perceptions/vaccination beliefs over time, challenges and strategies for building & sustaining community support, and the impact of public health campaigns on vaccination intention.

**Findings**
► The project found that the COVID-19 pandemic had led to a more engaged and active public, driven by knowledge rather than fear. However, this increased engagement also led to increased refusal of routine childhood vaccines, increased awareness of the risks of vaccines, and a shift in the expectation of discussions for all vaccines, not only the COVID-19 vaccine.

► The project also found that communication preferences varied among different communities. Some preferred two-way dialogues with professionals from their community, while others preferred receiving information through social media, radio, posters, GPs, and translated resources.

**Recommendations**
► The project recommended that staff training, time, and resources are required to facilitate a more effective decision-making process that has during the COVID-19 pandemic. It also suggested ongoing communication that provides evidence of effectiveness, side-effects, and the balance of risk to shift attitudes from negative to positive over the long term. The project also recommended combining COVID-19 vaccine communications with health information that is relevant to diverse communities to increase relevance and engagement.

► This case study highlights the importance of tailored communication strategies in promoting vaccine uptake among diverse communities, and the need for ongoing research and engagement to address the challenges posed by the COVID-19 pandemic.
Relationships and Resilience

The strength and resilience of a community are shaped by various factors, including its vulnerability to stressors (events or factors that cause stress) and its capacity to handle shock hazards (unexpected disasters). Additionally, the community's social connections play a vital role. These connections can be within a group sharing similar identities (bonding), between diverse groups (bridging), or with different authorities providing resources and support (linking). By understanding these connections, communities can better cope with challenges and recover from disasters. For example, when parliamentarians work to strengthen bonds within their constituencies and build bridges between different community groups, they enhance the community’s ability to withstand and recover from disasters and emergencies.

KEY THEMES BETWEEN RELATIONSHIPS AND RESILIENCE

Survival and Social Connection:
Research has shown that communities with stronger social connections have better survival rates during disasters. For instance, during the 2011 tsunami in Japan, towns with more robust social connections reported fewer fatalities, suggesting that the strength of social ties was a more significant survival factor than physical protective measures like sea walls.

Benefits of Relationships:
Strong relationships within a community can enhance resilience in several ways. They can contribute to better health outcomes, comparable to the benefits of quitting smoking or reducing obesity. They also promote happiness, safety, inclusivity, and active engagement within the community.

Enemy Thinking:
However, communities must also be aware of the potential for "enemy thinking," which includes behaviours like spreading rumours, blaming, and focusing inward rather than considering the broader context. This kind of thinking can undermine community cohesion and resilience.

Time and Hope:
In the aftermath of a disaster, communities need time to heal and refocus. During these times, it's crucial to remember the moments of unity and strength that emerged during the crisis. This sense of hope can be a powerful factor of recovery.

Recovery:
Recovery from disasters is heavily dependent on social capital, which serves as the primary focus for long-term recovery. Community-led recovery efforts that are clear, coordinated and transparent can significantly enhance this process.

Engagement:
Engagement within a community should be on the community’s terms. This means addressing the issues they find most important, in the places they identify, using methods they find most accessible, and within a timeframe that is achievable.

Resilient Communities:
In essence, resilient communities are prepared for any, if not most eventualities. They are able to cope with adversity and take advantage of opportunities. As a community strengthens its connections, the cycle of resilience becomes more dynamic, enhancing its ability to recover from various shocks.
Session 5 The Role of Technology in Disaster Management:

The Role of Technology in Disaster Risk Management

Technology plays a crucial role in disaster risk management and resilience. It can help predict when a disaster might occur, which is vital for preparedness and mitigation efforts. For instance, meteorological technology can forecast weather patterns that might lead to natural disasters such as hurricanes or floods. Seismographic technology can help monitor earth tremors that could signal an impending earthquake.

Technology also aids in increasing resilience, specifically relating to the ability of a system, community, or group to adapt to hazards. Digital platforms can be used to disseminate information quickly, alerting communities to disasters and providing them with necessary safety measures.

Furthermore, technology can simulate different scenarios. This could mean using different computer models to predict the outcomes of various disaster response strategies, which can help decision-makers choose the most effective option.

Technology can also help understand how climate change impacts disaster occurrence. Climate models can predict how global warming might increase the frequency of certain disasters, such as droughts or floods. This information is crucial for long-term disaster risk management and planning.

Finally, transparency in technology applications for disaster management is crucially important. Open source and community-driven approaches can build trust and ensure that the tools are accessible and understandable to those that need and rely on them. Effective communication is also a key aspect, with the need for early warning systems to alert communities about potential threats and oncoming disasters.

Case Study: SCIMAP - Technology in Disaster Management

**SCIMAP** (Sediment, flooding, marine ecosystems, and ecotourism) is an accessible and widely-used toolset for addressing environmental challenges in disaster management. It rapidly assesses relative risks within a catchment by mapping ‘Critical Source Areas’ to identify potential sources of diffuse pollution.

This toolset simplifies the complex task of pinpointing the most probable sources of pollution by focusing on relative risk rather than absolute risk. Its process representation is easily understood by stakeholders, facilitating their involvement and support. The SCIMAP toolkit comprises different components tailored to specific environmental issues, such as sediment, floods, and nutrients, each supported by scientific literature.

SCIMAP not only identifies areas for mitigation actions, including nature-based solutions, but also ranks their importance. This information can inform approaches such as payment for ecosystem services or offsetting within catchments. By analyzing catchments at a minimal cost, SCIMAP maximizes the budget available for mitigation actions, addressing multiple pressures like sediment, nutrients, FIOs (Faecal Indicator Organisms), and floods.

In a case study focused on the Karnali River catchment in Nepal, SCIMAP was used to predict flood hazards. The study aimed to quantify the impact of climate change on flood flows, predict morphological changes of the Karnali Fan, and project spatial flood hazard patterns. Results revealed an increase in projected peak runoff under different climate scenarios, with the 1-in-100-year flood event projected to rise by 40% (medium emissions) and 80% (high emissions) by the end of the century.
Research is crucial in disaster risk management as it provides valuable insights and data that can inform decision-making processes. For parliamentarians, this information is vital when drafting legislation, setting budgets, and overseeing and scrutinising government action related to disaster management. Research allows for a deeper understanding of the places affected by disasters, enabling parliamentarians to make informed decisions that reflect the realities on the ground. Comparative analysis of different disasters and their impacts can guide policymaking, helping to identify what works and what doesn’t. Research also offers a critique of existing disaster management strategies, which can lead to the development of more effective policies and laws. Furthermore, research fosters collaboration and participation among various stakeholders, including government agencies, non-governmental organisations, communities, and individuals. This collaborative approach can lead to more comprehensive and inclusive disaster risk management strategies, which parliamentarians can support through legislation and advocacy.
Case Study: Sewer Flooding

The case study on sewer flooding discusses a project funded in collaboration with a water company. The project examined the application of participatory research approaches, or meaningful customer engagement, to sewer flooding:

- **Sewer Flooding**: Sewer flooding, often caused by insufficient capacity in the sewerage system and failure due to collapse, blockage, or equipment failure, poses health risks and environmental deterioration. In the UK, 90% of sewer flooding incidents are caused by blockages, costing around £100 million to clear.

- **Research Undertaken**: The research involved a series of steps, including hotspot analysis of sewer flooding, customer interviews, thematic analysis, and Targeted Stakeholder Analysis (TSA) interviews. The process helped identify central themes and develop potential solutions.

- **Customer Engagement**: The research highlighted the importance of customer engagement in managing sewer flooding. Customers can report early warning signs of sewer blockages and flooding, and large-scale initiatives can be implemented to promote proactive management.

- **New Perspectives on Sewer Flooding**: The research revealed new perspectives on sewer flooding, including customers’ experiences and concerns, such as sewage odor, anxiety about flooding, and the desire for more information and effective solutions.

- **Potential Solutions**: The research suggested potential solutions, including educating customers on how to identify early warning signs of sewer flooding, clarifying the correct course of action, and encouraging customers to report issues to the water company.

- **Business Outcomes**: The research informed current business practices and led to recommendations for change. It enhanced the delivery of the Drainage and Wastewater Management Portal (DWMP), improved the use of participatory approaches within the business, and provided new knowledge about sewer flooding.
Throughout the Workshop, participants had the opportunity to offer continuous feedback on the workshop sessions and share their expectations and insights. They were also invited to complete pre- and post-assessment forms, the results of which are depicted in the graphs below.

The feedback from participants was very positive. They expressed satisfaction with the session panellists, materials and facilitators. Participants were particularly impressed with the high-calibre session speakers and the expertise they imparted on their respective areas.

The pre-assessment forms included questions about their knowledge levels in the relevant areas of disaster risk management covered in the workshop. In the post-assessment forms participants were then asked again on their levels of knowledge in the same areas to track learning. The charts below show the results.

Please rank your level of understanding of the following subjects before/after the Workshop:
Overall, levels of knowledge and understanding increased in every area. A six-month follow-up with the participants will take place to see how Members are using the skills and knowledge they gained and whether they are applying them in practice within their respective jurisdictions.

“All of the sessions were most informative and helpful. The experience of hearing some Members impactful stories of earthquakes and volcanoes was very moving.”

Hon. Lin Maurice, Alderney

“After the workshop I will connect with local experts in my country to ensure we deliver better disaster preparedness strategies”

Lord Fakafanua, Tonga
**OUTLINE PROGRAMME**

**DAY 1**

**Basinghall Suite, Guildhall, City of London**

08:10 **Pick-up from hotel**
*Delegates to be ready for pick-up by coach from the hotel lobby to the workshop venue.*
Park Plaza London Waterloo Hotel

08:45-09:00 **Arrival at workshop venue**
*Delegates arrive at workshop venue.*
Basinghall Suite, Guildhall, City of London

09:00-09:30 **Opening Ceremony**
Welcome address by:
- Joy Burch MLA, Speaker of the ACT Legislative Assembly, CPA Small Branches
- Chairperson
- Mr Stephen Twigg, Secretary General, Commonwealth Parliamentary Association
- Kate Cochrane, Durham University, Institute of Hazard, Risk and Resilience

09:30-10:00 **Housekeeping**
*Delegates will be required to complete a pre-assessment form.*

10:00-12:30 **SESSION 1 - RISK, RESILIENCE & COMMUNITIES**
*This session would focus on building a shared understanding of disaster risk management and resilience in small jurisdictions.*

10:00-10:30 **Introduction to disaster risk management and resilience**
- Introduction to disaster risk management and resilience
- Definition of disaster risk management and resilience
- Overview of the key concepts and principles
- Q&A

10:30-10:45 **Tea & Coffee Break**

10:45-11:45 **Understanding community vulnerabilities and capacities**
- Importance of community engagement and participation
- Identifying and analysing community vulnerabilities and capacities
- Strategies for building community resilience to disasters
- Q&A

11:45-12:30 **Understanding community vulnerabilities and capacities**
- Importance of community engagement and participation
- Identifying and analysing community vulnerabilities and capacities
- Strategies for building community resilience to disasters
- Q&A

12:30-13:30 **Lunch**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>13:30-16:00</td>
<td><strong>SESSION 2 - DEMOCRACY &amp; DISASTERS</strong></td>
<td>This session would explore the importance of maintaining democratic processes during disasters, decision-making under pressure, ensuring accountability and transparency in disaster management and the role of Parliamentarians.</td>
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</table>
| 13:30-14:15  | **Maintaining democratic processes during disasters** | Overview of the principles of democracy and how they apply to disaster management  
Examples of how democratic processes have been impacted during disasters |
| 14:15-15:00  | **Decision-making under pressure**     | Importance of making decisions quickly during disasters  
Strategies for making decisions with limited information  
The role of parliamentarians in decision-making during disasters  
Q&A |
| 15:00-15:10  | **Tea & Coffee Break**                 |                                                                             |
| 15:10-15:40  | **Accountability and transparency in disaster management** | The importance of transparency and accountability in disaster management  
Strategies for ensuring transparency and accountability in disaster management  
Q&A |
| 15:40-16:00  | **Insights and reflections**           | Opportunity to share their insights and reflections on the session          |
| 16:00        | **End of Day 1**                       | Delegates will be transported back to the hotel. Free evening.              |
### DAY 2

**Basinghall Suite, Guildhall, City of London**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>08:10</td>
<td><strong>Pick-up from hotel</strong></td>
<td>Delegates to be ready for pick-up by coach from the hotel lobby to the workshop venue&lt;br&gt;Park Plaza London Waterloo Hotel</td>
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<tr>
<td>08:45-09:00</td>
<td><strong>Arrival at workshop venue</strong></td>
<td>Delegates arrive at workshop venue&lt;br&gt;Basinghall Suite, Guildhall, City of London</td>
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<tr>
<td>09:00-09:30</td>
<td><strong>Reflections from Day 1</strong></td>
<td>Delegates will have the opportunity to provide feedback from Day 1 and to preview the sessions of Day 2</td>
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<tr>
<td>09:30-12:30</td>
<td><strong>SESSION 3 - AFTER DISASTERS</strong></td>
<td>This session would focus on understanding the impact of decisions made during disasters on recovery efforts and learning from the experiences of parliamentarians in disaster-affected communities.</td>
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<tr>
<td>09:30-10:00</td>
<td><strong>Timeline of emergencies</strong></td>
<td>Overview of the disaster management cycle&lt;br&gt;Importance of planning for post-disaster recovery&lt;br&gt;Q&amp;A</td>
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<td>10:00-10:45</td>
<td><strong>Recovery after emergencies</strong></td>
<td>Impact of decisions made during disasters on recovery efforts&lt;br&gt;Overview of the ways in which decisions made during disasters can impact recovery efforts&lt;br&gt;Examples of successful recovery efforts</td>
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<td>10:45-11:00</td>
<td><strong>Tea &amp; Coffee Break</strong></td>
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<tr>
<td>11:00-12:00</td>
<td><strong>Experiences of parliamentarians in disaster-affected communities</strong></td>
<td>Guest speakers from disaster-affected communities will share their experiences and perspectives on disaster management and recovery&lt;br&gt;Q&amp;A</td>
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<td>12:00-12:30</td>
<td><strong>Guided group discussion</strong></td>
<td>Sharing insights and reflections&lt;br&gt;Participants will share their insights and reflections on the session&lt;br&gt;Q&amp;A</td>
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<td>12:30-13:30</td>
<td><strong>Lunch</strong></td>
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<td>Time</td>
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<td>13:30-16:00</td>
<td><strong>SESSION 4 - FEELING SAFE, BEING SAFE</strong></td>
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<td>This session would explore the psychological and social factors that influence disaster preparedness and response, as well as strategies for increasing community trust and social connections.</td>
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<td>13:30-14:00</td>
<td><strong>Risk perception and community resilience</strong></td>
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<td>How we perceive low probability/high consequence risks</td>
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<td>Impact of risk perception on decision making – leadership and communities</td>
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<td>Strategies that support communication with vulnerable populations</td>
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<td>14:00-14:30</td>
<td><strong>Supporting diverse communities</strong></td>
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<td>Recognising diverse perspectives and needs</td>
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<td>Factors influencing unequal disaster impacts</td>
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<td>Tailoring risk and crisis communication for diverse communities</td>
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<td>Q&amp;A</td>
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<tr>
<td>14:30-14:45</td>
<td><strong>Tea &amp; Coffee Break</strong></td>
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<td>14:45-15:15</td>
<td><strong>Community connections and relationships</strong></td>
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<td>Importance of relationships in developing resilient communities</td>
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<td></td>
<td>Strategies for building trust and social connections</td>
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<td>Supporting relationships when communities are under pressure</td>
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<td>15:15-16:00</td>
<td><strong>Group activity: Developing community-based disaster preparedness plans</strong></td>
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<td>Participants to consider what needs to be included in a community-based disaster preparedness plan</td>
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<td></td>
<td>Role of Parliamentarians in the developing community response plans</td>
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<td>16:00</td>
<td><strong>End of Day 2</strong></td>
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<td>18:00-20:00</td>
<td><strong>SPEAKER’S RECEPTION</strong></td>
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<td>Speaker’s State Rooms, Houses of Parliament, London</td>
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<td>All delegates will be transported directly to the Speaker’s Reception following conclusion of the workshop.</td>
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DAY 3

Basinghall Suite, Guildhall, City of London

08:10  **Pick-up from hotel**
Delegates to be ready for pick-up by coach from the hotel lobby to the workshop venue
Park Plaza London Waterloo Hotel

08:45-09:00  **Arrival at workshop venue**
Delegates arrive at workshop venue
Basinghall Suite, Guildhall, City of London

09:00-09:15  **Reflections from Day 2**
Delegates will have the opportunity to provide feedback from Day 2 and to preview the sessions of Day 3

09:15-10:15  **SESSION 5 - TECHNOLOGY AND DISASTER RISK MANAGEMENT**
This session would explore the ways in which technology can be used to support disaster risk management and enhance disaster resilience.

09:15-10:15  **The role of technology in disaster risk management and resilience**
Successful applications of technology in disaster risk management
Challenges and opportunities associated with technology in disaster risk management

10:15-12:45  **SESSION 6 - FINANCING DISASTER PREPAREDNESS AND RESPONSE**
This session would explore the economic impact of disasters, the cost of disaster preparedness and mitigation, and the importance of investing in disaster resilience

10:15-10:45  **The cost of disaster preparedness and mitigation**
Overview of the costs associated with disaster preparedness and mitigation
Examples of successful disaster preparedness and mitigation efforts

10:45-11:00  **Tea & Coffee Break**

11:00-11:30  **The economic impact of disasters and the importance of investing in disaster resilience**
Overview of the economic impact of disasters and the importance of investing in disaster resilience
Strategies for financing disaster preparedness and response efforts

11:30-12:15  **Understanding financing mechanisms for disaster management and recovery**
Overview of financing mechanisms for disaster management and recovery
Examples of successful financing mechanisms for disaster management and recovery

Q&A
<table>
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<tr>
<th>Time</th>
<th>Activity</th>
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| 12:15-12:45 | **Group activity: Identifying financing mechanisms for disaster management and recovery**  
Participants will work in small groups to identify and analyse financing mechanisms for disaster management and recovery |
| 12:45-13:30 | **Lunch**  |
| 13:30-15:30 | **SESSION 7 - RESEARCH & DISASTERS**  
*This session would explore the role of research in disaster risk management and the ways in which research can be used to inform policy and practice.* |
| 13:30-14:30 | **The importance of research in disaster risk management**  
Overview of the role of research in disaster risk management  
Examples of how research has informed policy and practice in disaster risk management  
Q&A  |
| 14:30-14:45 | **Tea & Coffee Break**  |
| 14:45-15:30 | **Linking with the international community**  
Strategies for connecting with the international community in disaster risk management  
Examples of successful collaborations between researchers, practitioners and parliamentarians  
Q&A  |
| 15:30-16:00 | **CLOSING CEREMONY**  
*This will be an opportunity to review the learning from the workshop with participants. Participants will also be asked to complete the post-assessment forms*  |
| 16:00 | **End of Day 3**  
Delegates will be transported back to the hotel. Free evening.  |