

Resilience  
Series Partner



# Key insights for states and regions' approaches to building resilience

Building on findings from the World Risk Poll





# Foreword

## Growing resilience with data and collaboration

**We are fortunate that most days we can speak with our members of the Under2 Coalition, the largest network of subnational governments that has committed to net zero by 2050 at the latest. Not only that, our members also form an economic powerhouse – they represent around half of the world’s economy.**

Many of these states and regions are at the forefront of the climate crisis – their communities are hardest hit, facing heat, droughts, flooding, hurricanes, and other severe weather events. But they are also a powerful player in the fight against climate change: they can change policies and regulations such as setting net zero targets in procurement procedures, push for emission transparency, and implement nature-based solutions in close coordination with the very communities they are trying to protect.

But, our states and regions, can’t just focus on mitigation. They equally need to ensure their communities are resilient enough to face the climate impacts that are already here. To be able to do that, they need data and the best practices on how to adapt and ensure resilience.

For exactly that reason, Climate Group partnered with Lloyd’s Register Foundation for the Resilience Series. Together, we took the World Risk Poll, the largest global study into the risk perceptions of people, to the members of the Under2 Coalition.

Delegations met in the run up to Climate Week NYC, during a session at the event itself, and at COP28, where subnational governments played a more pronounced role than ever before. Slowly, their critical position in fighting climate change and its consequences is recognised.

Below are the findings of the Series – the challenges, the barriers, but also recommendations that will help communities cope with the challenges that climate change brings. The members’ input, in return, will help shape datasets across the globe, including the World Risk Poll. With increased climate impacts driving the need for faster resilience building, this cross pollination is critical, and we thank Lloyd’s Register Foundation for driving it forward with the Under2 Coalition members.

**Dr Champa Patel,**  
Executive Director Governments and Policy,  
Climate Group



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# Summary



**2023 was a year of extreme weather events: it broke the 1.5 degree threshold, heatwaves scorched the earth, wildfires devastated parts of Hawaii and Canada, and flooding made tens of thousands of homes unliveable.**

**To support millions of people on the frontline of the crisis, Lloyd's Register Foundation and Climate Group set up the Resilience Series, taking the World Risk Poll, which includes the largest global study of people's climate risk perceptions, to the states and regions of the Under2 Coalition.**



**The goal:** to scope out challenges, opportunities and the urgent need for a data-based approach to build resilient local communities in the face of a changing reality.

Climate resilience and the costs involved are often cited as key priorities for subnational governments across the globe that are at different stages of development. Yet real opportunities for formal knowledge building and best practice sharing in this area are limited – including the availability of data to inform solid policy making.



## **Introducing the World Risk Poll:**

Data for understanding and improving climate resilience

Wednesday, August 16, 2023

Online webinar

[Find out more](#)



## **From insights to action:**

Using the World Risk Poll to inform climate resilient societies

Tuesday, September 19, 2023

Climate Week NYC, New York City, US

[Find out more](#)



## **Under2 Coalition General Assembly**

**at COP28:** Bridging perspectives: subnational insights on climate resilience in a fast-changing reality

Sunday, December 3, 2023

Under2 Coalition General Assembly, COP28, UAE

[Find out more](#)





As we continue to work on mitigation and net zero emissions, we need to keep paying more attention to direct impacts of climate change at community level, and build resilience where we can, based on the available data.

In 2021, Lloyd's Register Foundation conducted the second edition of their World Risk Poll, a unique global study to understand people's perceptions and experiences of risks to their personal safety, including severe climate and weather events – the biggest risk faced by people and communities globally. The Poll was based on interviews with 125,000 people in 121 countries worldwide, and for the first time included questions on key factors that influence the resilience of individuals, households, communities and societies in the face of climate change and other threats.

The Under2 Coalition, of which Climate Group is the Secretariat, consists of more than 270 subnational governments from across the globe and is the largest

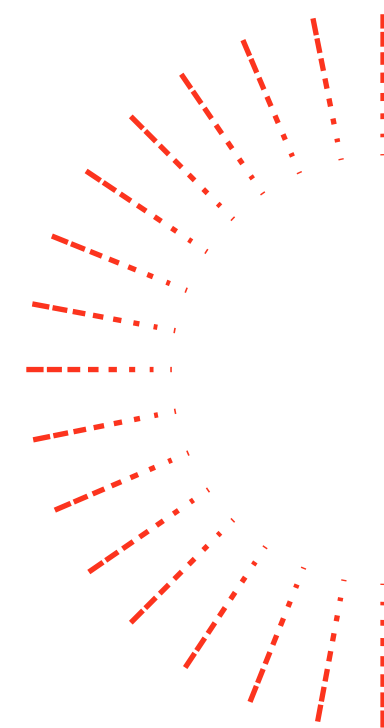
network of subnational governments committed to reaching net zero emissions by 2050 – or earlier.

Together, Lloyd's Register Foundation, Climate Group and members of the Under2 Coalition set up online and in-person engagements under the umbrella of the Resilience Series to introduce states and regions to the World Risk Poll data, foster discussions and co-design resilient systems that make the world a safer place to live.

As the need for climate resilience dramatically increases, this series stands as a testament to the power of data, shared insights, and cross-sector collaboration in navigating the challenges of a rapidly changing climate landscape.

#### Knowledge reach:

The series convened **59 subnational governments** from across all continents and national and intergovernmental agencies, including the **UN** and the **Federal Emergency Management Agency (FEMA)** and civil society actors, such as, **Resilience Rising, Regions4** and **Resurgence**.



# Partner reflections

Dr Ruth Bounphrey, Chief Executive, Lloyd's Register Foundation



**Subnational governments are on the frontlines of the climate crisis. Whether dealing with increasingly frequent flooding events or severe heatwaves and droughts, authorities at regional and city levels are among the first responders when global failures to mitigate planet-warming emissions manifest as urgent threats to the safety of people and property.**

That's why we decided to work with the Under2 Coalition on this Resilience Series, as an important route to impact for our World Risk Poll data, which contains key insights about the vulnerabilities and resilience of people and communities around the world in the face of climate-related hazards. It is our hope that subnational governments – alongside a range of other stakeholders, including national and intergovernmental organisations, industry and NGOs – can use this data to help inform and improve resilience planning and interventions.

The Resilience Series has been far from a one-way process, and it has been a valuable privilege to hear directly from subnational governments about the challenges they face and the conditions necessary to overcome them, including a rebalancing of

funding between disaster response and proactive, pre-emptive resilience and adaptation strategies. The importance of communities was also stressed throughout – not just of collecting data about them, but also of involving them closely in decision-making.

These conversations have provided validation of the potential of the World Risk Poll to fill crucial data gaps on climate risk and resilience, particularly, for example, in relation to the efficacy of disaster early warning systems.

However, we have also learnt that there is further work that can be done to improve the usefulness of the data for subnational stakeholders. As we work towards the next edition of the Poll, we are refining and improving the question set, as well as looking

at ways to provide more localised data. We look forward to continuing to work with the Coalition and its members to provide actionable insights to improve resilience and safety in the face of the climate challenge.



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**We are starting way behind on the resilience agenda – for a long time the focus has been on mitigation. The data set is about perception – of real people and places versus observed data – there is a distance between this data.**

**Seth Schultz,**  
Chief Executive Officer, Resilience Rising

# Key insights

## Conditions for success

**While mitigation has always been at the forefront of discussions, the climate crisis has become very real for people across the world. A key question is how to make the world a safer, more resilient place to be right here and now – and it’s one that subnational governments are both working on, and struggling with.**

The World Risk Poll provides invaluable insights on people’s perceptions and experiences of risks to their personal safety, and the vulnerabilities of their families, their communities and their societies.

With many people living paycheck-to-paycheck, the Poll revealed that 10% of the global population is unable to survive more than a week without income. This puts hundreds of millions of people at extreme risk from the economic effects of climate-related disasters. In some parts of the world, people can be hit by different crises in short succession. In other parts, homes and livelihoods have become expensive, or sometimes even impossible to insure – resilience and adaptation measures can help tackle that problem.

The discussions in the Resilience Series clearly laid out certain conditions that need to be in place for a successful shift from a focus solely on mitigation to a view that also includes resilience building.

**Discussing the conditions that need to be met, members of the Under2 Coalition mentioned that the following parameters need to be in place, and the challenges they face in overcoming them.**

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**Climate Group has traditionally been mitigation-focused. However, there is a lot of demand from government members, particularly those from the Global South and vulnerable regions, to focus on adaptation and resilience.**

**Jebi Rahman,**  
Head of Global Implementation, Climate Group

# Conditions for success



## 1

## A holistic approach

As many of the challenges are interconnected, a holistic understanding of resilience at individual, household, community and society levels is crucial for addressing these complex issues in an effective way. Resilience indicators at each of these levels include the feeling of individual agency, household disaster planning, community support networks, and government preparedness.

*"We have to look at systemic risks rather than one risk at a time – holistic resilience."* **Savina Carluccio, Executive Director, International Coalition for Sustainable Infrastructure**

*"Resilience needs to be brought to every level of the community and ask if we can anticipate what might come. Can the community cope and can it recover? Communities have to be involved in their own resilience."* **Noloyiso Walingo, Director, Climate Change & Environmental Planning, Governance & Information Management, KwaZulu-Natal Province Economic Development, Tourism, & Environmental Affairs (South Africa)**

Data is critical for informing climate resilience policies and interventions, as it enables us to better understand what families or communities need, where droughts, blistering heatwaves, sudden hurricanes or flooding might strike, what the immediate and longer-term safety impacts could be, and how future risks can be mitigated.

Building on the holistic approach, it's important to utilise diverse and complementary data sets, including perception data (such as from the World Risk Poll), satellite and emissions data, AI models and geospatial data. Accurate and timely information is essential for effective decision-making.

To ensure essential data is accessible, enabling policies and regulations need to be in place.

*"Law and data driven institutions need to be strengthened. Without robust data, they can't make decisions."* **Nathalie Flores, UN Climate Change Science and Technology Vice-Chair**

*"The World Risk Poll is the closest we have to a proxy indicator of how the Early Warnings for All initiative is doing. I hope that over time we can connect the global picture with what we're doing on the ground, such as through our DARAJA partners, at a micro level. We need to connect the World Risk Poll to the early warning system and the messages about resilience that are coming out of COP."* **Mark Harvey, CEO, Resurgence**

## Community engagement

## 3

Involving communities, not only in the delivery of resilience efforts, but also in the planning and decision-making processes is crucial. Citizen science, local knowledge, and active community buy in are valuable resources in building resilience.

*"[In Catalonia], the most affected sector is the primary sector. We have to make sure we provide these sectors with the right economic support.*

*We have announced 168 million euros in aid for farmers to enable them to survive against these changing conditions. But of course urban and rural environments are very different. They face different challenges."*

*"Local and regional governments are on the ground, closer to the people, and we carry out most of the mitigation and adaptation. If you can't fight the problem you have to learn to live with it."*

**David Mascort, Minister of Climate Action, Food and Rural Agenda, Government of Catalonia (Spain)**

*"Citizen science is important because people know things about their local areas that can be put together with the data that we have to reach solutions. Communities need to understand they are decision-makers. Everyone needs to know that when there's information at their disposal, they are the decision-makers and not only the government."* **Noloyiso Walingo, Director, Climate Change & Environmental Planning, Governance & Information Management, KwaZulu-Natal Province Economic Development, Tourism, & Environmental Affairs (South Africa)**

# Barriers to success

With some of the conditions laid out, members and other high-level stakeholders highlighted some of the challenges that influence their capacity to speed up the building of resilient, safe communities.

## 1 Overlooked impacts

Slow onset impacts of climate change, including the health and safety consequences of heatwaves, cold and drought, can be hard to predict and can be overlooked. It is important to address these neglected aspects rather than focusing solely on acute disasters such as storms and flooding.

## 3 Complexity of resilience planning

Bringing together diverse stakeholders and sectors to address resilience is key, but difficult to achieve in many geographies. Swift consensus without bureaucracy is critical in overcoming the complexity of resilience planning.

*"It is challenging to bring together different stakeholders/all of society to develop and put into practice programmes that better address resilience."* **Giorgio Maione, Minister for Environment and Climate, Lombardy Government (Italy)**

## 4 Budgetary constraints

Some regions, often those on the frontline of the crisis, face financial challenges in balancing short-term responses to disasters and investing in long-term adaptation and resilience measures. Ample funding for vulnerable sectors, including through the Loss and Damage Fund that was put in place at COP28, is critical for effective resilience strategies.

## 2 Data gaps

Data is critical, but the speed of climate changes makes it difficult to capture and analyse data quickly, causing a gap between observed (but outdated) data and lived realities on the ground.

*"There is a strong reliance on satellite data, but little understanding of local communities or indigenous perspectives regarding climate risks and solutions. We need to understand these perspectives and help bring them into data and solutions decision-making platforms."* **Marcia Toledo Sotillo, Director Adaptation and Resilience, High Level Climate Champions Race to Resilience**

*"As a territory, we have been working on resilience for the past 15 years, including urban design and resilient cities, however things are moving too fast – it is difficult to gather data at that speed."* **Ricardo Torres, Undersecretary of the Environment, Government of Queretaro (Mexico)**

## 5 Information overload and disinformation

The complexity of information, coupled with the prevalence of disinformation, especially online, poses significant challenges. Balancing information overload and ensuring accurate, accessible information is critical for an evidence based approach and buy-in at community level.

*"The World Risk Poll showed that rich developed countries had access to internet information, which made them feel safer. However, during Covid, we also saw a lot of disinformation online. Young people are fatalistic – nothing we can do attitude – this is a huge problem. We also have an issue with information overload."* **Mike Rann, Chair of the UK Board, Climate Group**



# Lessons learned and recommendations

Based on the insights from Under2 Coalition members, the Lloyd's Register Foundation World Risk Poll, and other critical stakeholders during the Resilience Sessions, several lessons learned and recommendations came to the forefront. The below list is an important first step in working towards a more holistic, inclusive approach to building resilience at individual, household, community and societal levels.

## 1 Importance of local context

Resilience planning should take local context and discussions at community level into account. Understanding differences in how resilience can be perceived, and addressing these diverse challenges and learning each from best practices, is crucial. This also means there's need for capacity building at local and regional levels to understand and implement resilience solutions.

## 2 Data-driven decision-making

Up-to-date and timely data from multiple sources should be used to drive decision-making. This involves not only the collection of data but also its effective interpretation and application in developing resilient policies. For example, data from the World Risk Poll can be combined with other data sets to design and improve early warning systems that reach communities before a crisis hits, saving lives, homes and livelihoods.

## 3 Need for rapid adaptation

The rapid pace of climate change means there's a need for adaptive strategies that can keep pace with the speed of environmental transformations.

## 4 Inclusive resilience

The need for inclusive resilience efforts that consider individual, household, community, and societal factors, and how these vary among different demographics within vulnerable communities, was a recurring theme. This includes empowering communities and ensuring that no one is left behind in resilience planning, involving local communities from start to finish to ensure local expertise and buy-in.

## 5 Addressing budgetary constraints

The series highlighted lessons in dealing with budgetary challenges. Recommendations may involve exploring innovative financing mechanisms and ensuring that funds are allocated strategically to balance response and long-term resilience measures.

## 6 Policy integration

It's important to integrate resilience considerations and evidence based decisions, measures and targets into other areas of policy.

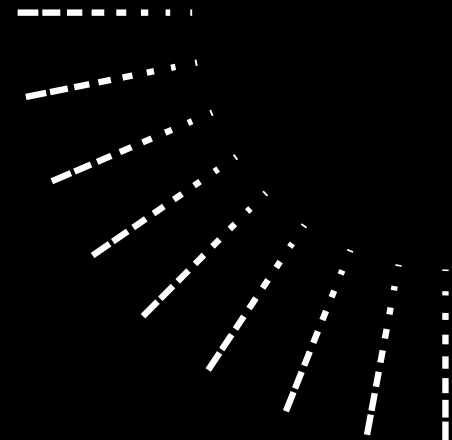
# Looking ahead

## Lloyd's Register Foundation: The World Risk Poll

- The resilience report of the 2023 World Risk Poll will be published in June 2024, and its data and insights disseminated to Under2 Coalition members to monitor how climate risk and resilience has changed in their regions.
- Lloyd's Register Foundation is refining the question set for the 2025 World Risk Poll based on feedback provided by Under2 Coalition members – for example it may incorporate questions about slow onset climate safety impacts such as heatwaves, to provide better data on their scale and impact.
- The Foundation will also look at how higher resolution, more localised Poll data can be provided – for instance, using geotagging – to be of greater benefit for subnational decision-making, particularly in coastal regions.
- The Foundation will continue to explore opportunities to partner with organisations and fund innovative resilience interventions that can put the World Risk Poll data into action, and encourages Under2 members to get involved in such proposals.







# Looking ahead

## Under2 Coalition: Aiming for net zero through joint climate action

- Going forward, Climate Group will continue to work with key partners, such as the Lloyd's Register Foundation and Regions4, to identify opportunities where we can support state and regional governments with tackling their adaptation and resilience challenges, particularly where this aligns with their efforts to reach net zero emissions.
- Climate change impacts are here, now, and Under2 Coalition governments are at the forefront of dealing with the challenges they pose to local communities and ecosystems. We will support them through targeted projects, partnerships and advice to ensure they are well equipped to meet these challenges head on.
- As we count down to COP30 in Brazil and the next round of Nationally Determined Contributions to tackle global emissions, we will also advocate at the highest levels for urgent action on adaptation and resilience. It is so often developing states and regions that are hardest hit by climate change and it's vital they have access to the funding and support they need to prepare for any future shocks.

# Thank you Lloyd's Register Foundation for partnering with us on the Resilience Series

Get in touch to learn more about how you can partner with us in 2024.

For any questions about the project, please contact Faryal Gohar,  
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