

Case Study

# Aspect

**Increasing future  
flood resilience**

2021





### **Venture**

Zurich Flood Resilience  
Alliance



### **Social science discipline**

Geography, Environmental  
Studies and Archaeology



### **Aspect Members**

London School of  
Economics and Political  
Science (LSE)



### **Sector**

Financial Services /  
Environment / Government  
& Public Services



### **Route-to-market**

Research Collaboration



# A multi sector partnership is helping communities build their resilience to flood risks and develop innovative preventative approaches.

Climate change is increasing the unpredictability of flooding, affecting over 734 million people in the last 10 years alone (IFRC, 2018), destroying lives, homes and businesses. Currently, as a society we are not managing our exposure and approach to these risks.



Photo by GEORGE MATHEW from Pexels

Initiated by Zurich Insurance and funded by the Z Zurich Foundation, the Zurich Flood Resilience Alliance is a multi-sectoral partnership committed to building flood resilience on a global scale. LSE's Grantham Research Institute on Climate Change and the Environment alongside Zurich, the Foundation, International Institute for Applied Systems Analysis (IIASA) and several non-government organisations (NGOs) are working together as Alliance members on testing incentives and flood resilience measures. The Alliance has created the Flood Resilience Measurement Tool for Communities (FRMC), a comprehensive and coherent framework for measuring community flood resilience. Academics from LSE, in collaboration with Zurich Flood Resilience Alliance, are leading the FRMC implementation in relation to urban areas in the UK and Germany, applying a range of social science concepts and insights to the project, including from geography, climate science, economics and governance studies, to improve how local authorities make decisions on flood resilience.

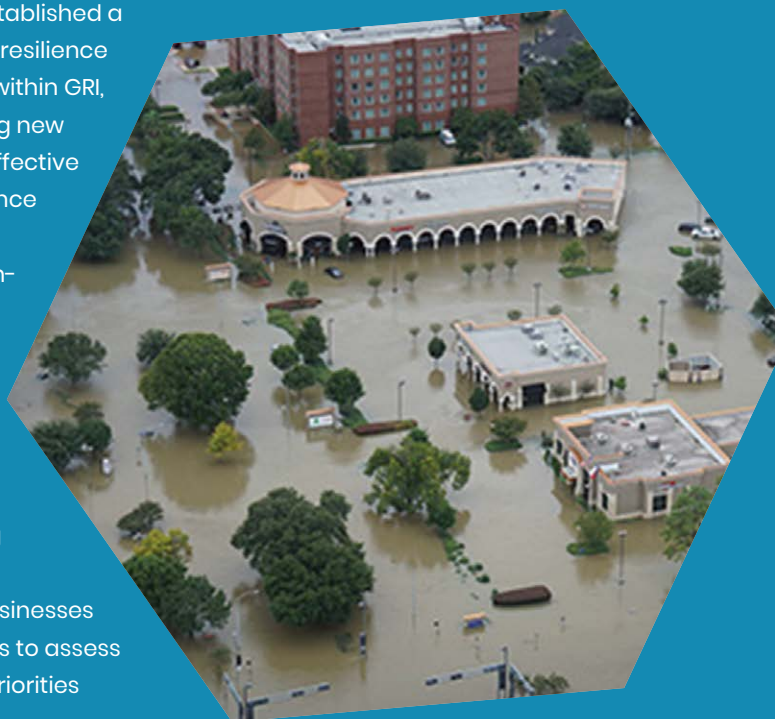
The main aims of LSE's work in UK and Germany (which includes working with

NGOs, private businesses and local authorities) are:

- to improve understanding of flood resilience trends across different local stakeholders.
- identify how communities can increase their resilience; and
- pave the way for more targeted and better-informed flood resilience investments.

Under the Zurich Flood Resilience Alliance grant, project lead, Dr Swenja Surminski has established a new urban flood resilience research group within GRI, which is exploring new approaches in effective pre-event resilience through social science research-based evidence. The academic team is applying their expertise, the FRMC and decision-making tools to enable homeowners, businesses and communities to assess their individual priorities

and develop innovative approaches that will improve their resilience to flooding. As a result, new policies are being embedded into longer term wider resilience planning by local authorities, ensuring urban areas are better prepared for the next flood/ natural disaster. The application of social sciences is playing a significant part in this.



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**The Alliance's measurement framework has been developed to consult whole communities – from business stakeholders, local government to individuals – working together to determine what individual and community-wide priorities. Unfortunately, the risk of floods is increasing in many places around the world. There needs to be investment into recognising the problem and developing strategies for resilience, informed by the different perspectives and needs of communities.**

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Dr Surminski, Principal Investigator, Zurich Flood Resilience Alliance



# The impact



- Multi sector partners have developed a better understanding of the knowledge and analytical evidence that exists and how it can be used to inform pre-event measures.
- Local drainage works in Germany have invested in free flood consultations for private households to improve household level flood resilience as an incentive to participate in the FRMC household survey along with free consultations to 100 businesses in the area.
- In the UK, Lowestoft has allocated internal funds to flood resilience through hiring a new member of staff specifically on flood risk management.
- The Zurich Flood Resilience Alliance's engagement with policy makers has supported a shift in public funding and focus: The UK Government will now use a new formula for allocating funding for flood and coastal defences across England, including investing £200m into help more than 25 local areas develop innovative actions that improve their resilience to flooding.
- The language now used in local authority and government advice and policies is changing from 'protecting' to resilience, a step change in the approach to flood risk management.

# The research collaboration journey: key learnings

Dr Surminski states that partnership development requires time and effort to come to fruition, but building a good rapport leads to a strong level of trust and further opportunities for collaborative working. Here are some of her key learnings from being a member of the Alliance:

- Working with practitioners offers many advantages to academics, as it enables direct access to the end beneficiaries of research, you can learn their needs and it forces you to tailor the academic knowledge to the needs of the partners. The local insights gained from NGOs and community partners is invaluable for research and when designing new tools and instruments.
- Involving post-doctoral students in the Alliance work exposes them to a wide range of stakeholders and builds their experience of working outside of academia and valuable knowledge for future partnership development.
- Research conducted as part of the Alliance is highly impact-driven, while also fulfilling highest academic standards.
- Conflicting timelines between academia and industry can create challenges and obstacles – it's important to clarify and manage expectations from the start of the project, to avoid any potential breakdown in the relationship.

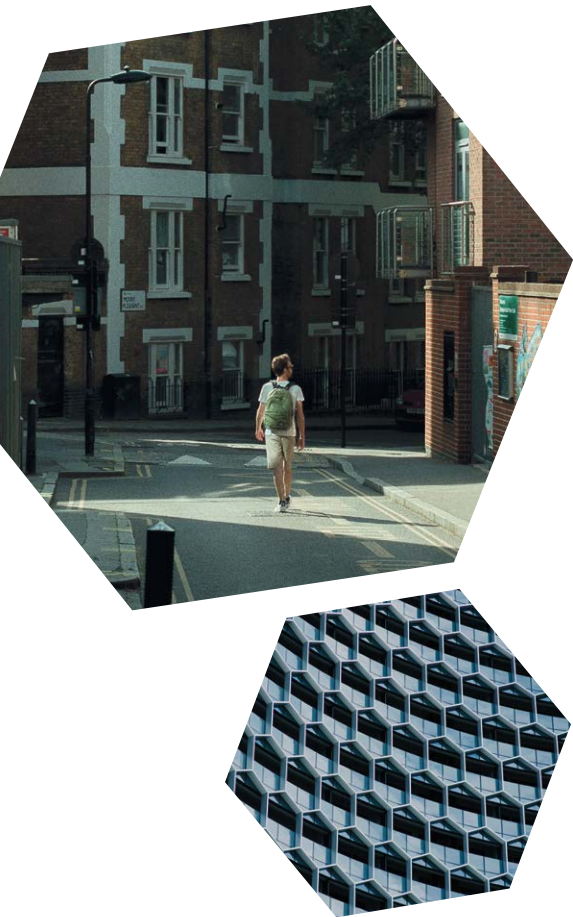
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**This was an academic led project development, with the project consortium co-created and led by the funding partner. My role in the business office support function was to advise and guide on the budget development, ensuring the project was fully costed and ensure the commercial considerations of LSE were fully included. I also provided support and guidance to the contract negotiation, coordinating our fixed points, clarifying and working through points of difference and LSE's funding development and approvals processes such as budget, contract, and ethical approvals. From a research collaboration support perspective, the skills needed are strong coordination, perseverance, able to go into detail and see the bigger picture, manage competing interests such as research interest with commercial interest of ensuring LSE does not under cost.**

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Kathy Samuel, Corporate Engagement Manager,  
London School of Economics and Political Science

# What's next for the Zurich Flood Resilience Alliance?



The partnership received funding initially to further evidence and run local resilience initiatives in the UK and Germany, with the aim to continue community engagement and consultations. This has now been increased by an additional £300k for an extension of GRI's Alliance work, including a spin off project with the IFRC in Philippine cities on urban resilience. LSE will collaborate with the local IFRC team, funded by Zurich and the project is due to start in 2021. An add additional spin-off project with Mercy Corps and the Insurance Development Forum has also been funded.

The research has triggered new investments by the insurance industry in flood resilience including a new collaboration on flood resilience with

Zurich Insurance Group Ltd , under Zurich Flood Resilience Alliance.

The Foundation is exploring a wider application of the Alliance approach,

which may include other single hazards such as urban heat. This will be piloted through local grant programs engaging Zurich businesses and potentially members of the Alliance .



**As insurers Zurich knows the impact that flooding causes and that prevention is cost-effective. Flood resilience cannot be enhanced by one stakeholder alone, which is why Zurich has created a multi-organizational partnership, with research and evidence key to underpinning practical efforts. The alliance brings together specialists which will lead to improved community resilience towards flooding.**

**This is a true collaboration.**



David Nash, Climate Change and Partnerships Senior Manager, Zurich Foundation

# Background Information



## Dr Swenja Surminski



### Role

Principal Investigator, ZFRA and Head of Adaption Research, Grantham Research Institute on Climate Change and the Environment, LSE.



### Degree

Ecological Economics and International Relations, University of New Hampshire and PhD in Political Science, Hamburg University.



### Contact

[s.surminski@lse.ac.uk](mailto:s.surminski@lse.ac.uk)

Swenja oversees social science research projects on climate adaptation, Loss and Damage of climate change and disaster risk finance with a geographic scope ranging from the UK to developing countries. Her research investigates climate risk management and resilience strategies focusing on public policies, financial instruments and individual behaviour through a mix of inter-disciplinary approaches, integrating concepts from geography, climate science, economics and governance studies. In addition to her academic career Swenja has spent more than 10 years in the international insurance industry working on climate risks and risk management.



## Case Study

# Aspect

Transforming Society Through  
Social Science Innovation

Aspect (A Social sciences Platform for Entrepreneurship, Commercialisation and Transformation) is a network for organisations looking to make the most of commercial and business opportunities from social sciences research.

Supported by Research England's Connecting Capability Fund, Aspect members sit at the epicentre of discovery, imagination and progress in the social sciences. We draw together pioneering academics with innovative industry leaders to tackle the most complex societal challenges of our time.



Aspect is funded by Research England's Connecting Capability Fund