



The Science for Humanitarian Emergencies and Resilience partnership (SHEAR)

2016-2022

## Summary

The Science for Humanitarian Emergencies and Resilience partnership (SHEAR) championed resilience in the face of disasters between 2016 and 2022. Funded by the United Kingdom's Foreign, Commonwealth and Development Office (FCDO) and Natural Environment Research Council (NERC UKRI), SHEAR involved unique interdisciplinary collaboration among researchers and humanitarians that looked at ways to improve understanding of climate-related risks as well as forecasts and early warning systems, in parallel with enhancing humanitarian actions to reduce this risk.

### About SHEAR

A 5-year research-practice programme from 2016-2022, mainly focusing on countries in Sub-Saharan African and Asia-Pacific, with stand-alone smaller grants in several other continents. Its aim, to support improved disaster resilience and humanitarian response by advancing monitoring, assessment and prediction of natural hazards and risks.

SHEAR worked with stakeholders across these regions to co-produce demand-led, people-centred science and solutions to improve risk assessment, preparedness, early action and resilience to hazards.



Key Themes: 1) Understanding hazard risk; 2) Developing early warning; 3) Developing early action 4) Monitoring, modelling, and forecasting 5) Interdisciplinary collaboration 6) User-centred communication 7) Governance and policy.

### Programme Structure

The programme comprised research and application components that aim to better understand the multifaceted and complex drivers of risk. Research institutions, international non-governmental organisations (NGOs) and hydro-meteorological services collaborated to deliver world-leading, interdisciplinary, end-to-end research with the goal of improving the characterisation and prediction of hazards, and analysing the evidence to support decision making processes for early action.



- Over 90 research-practice projects and grants
- With 68 global partnerships
- With 58 early career researchers.

### Results

Outputs and results of SHEAR have resonated throughout the early warning early action research, practice, and policy communities with:

- Nearly 70 global partnerships established
- Over 100 peer-reviewed papers
- Over 30 knowledge products were developed to disseminate scientific efforts to wider audiences
- Up to 80 innovative tools for Disaster Risk Reduction

### Find out more

- [SHEAR website](#)
- [SHEAR Resource directory](#).
- Contact information: [shear@nerc.ukri.org](mailto:shear@nerc.ukri.org)

