



Photo: Drought preparedness in Kenya through livelihoods diversification by KRCS/ICHA/PFR.

## Lessons for future funding

### SHEAR learnings

Effective investment in research can enhance disaster preparedness and resilience, saving lives and protecting communities. This brief explores key learning from across the SHEAR programme related to funding sustainable, high-impact research to improve disaster resilience.

### Summary

SHEAR projects have been working to develop and apply new science across a wide range of contexts. Now that the programme is drawing to a close, project teams have highlighted key learning and experience to apply to future funding.

SHEAR project teams emphasized the importance of investment in analysis and partnership; investment in data; investment in capacity building; investment in adaptation and the adoption of research innovations; and investment in collaboration across diverse research teams and workstreams.

### Investment in stakeholder analysis and trust building

[Science for Humanitarian Emergencies and Resilience \(SHEAR\)](#) programme teams reflected upon the areas of project investment that were most important. Several teams felt that some of the most impactful outcomes were those that are less tangible and more time-consuming: building relationships with stakeholders, building links between the different organizations that will lead the long-term delivery and maintenance of new methods and tools, and integrating scientific outputs into systems and practice. These activities require ownership, stakeholder buy-in, and an in-depth understanding of the context, stakeholders and politics – all of which need time to develop.

Several SHEAR teams referenced the importance of developing long-term relationships and engagements, and the value of innovative funding to foster and sustain longer term engagements in a given context. SHEAR teams emphasized that the resources needed to understand the context need to be prioritized and factored into project design, with activities planned and resourced from the outset. Sufficient time needs to be allocated and financed at the beginning, and throughout the life of the project, with flexibility to change pathways when necessary. Teams also emphasized the importance of the skills and capacity analysis of key stakeholders, enabling research teams to identify and address barriers to uptake and sustainability.

SHEAR teams noted the importance of undertaking stakeholder mapping as well as needs and capacity analysis before research project conceptualization. Some preferred this as a funded inception phase, whilst others valued pre-research needs analysis, enabling the co-creation of research priorities with key stakeholders.

### Investment in data

Where datasets are insufficient to enable the prompt initiation of research or, more often, where data quality and completeness is not well understood at the start of a project, this will impact significantly on research timelines and outcomes. SHEAR teams emphasized the importance of understanding the data landscape and securing a data foundation upon which the research can be built. Where existing datasets are insufficient, investment needs to enhance data capture and management, improving the availability and usefulness of data, prior to research. Another consideration is dataset legacy, ensuring funding is channelled into the maintenance of critical datasets, including aspects such as computing time, software licensing and data storage.

## About SHEAR

The SHEAR programme (Science for Humanitarian Emergencies and Resilience) carried out innovative research, in some of the most hazard-prone parts of the world, to better understand and forecast disasters, and minimize the risk they pose to vulnerable communities.

SHEAR cutting-edge research aimed to enhance the quality, availability and use of risk information and early warning systems.

SHEAR research brought together the unique knowledge and skills of stakeholders in physical and social sciences, disaster risk management practice, and policymaking. Effectively managing this range of expertise enabled SHEAR to deliver holistic cross-disciplinary, high-impact work on disaster risk and resilience.

For further information please see the [SHEAR Knowledge Product Directory](#).

## Investment in adoption & adaptation

Several SHEAR projects highlighted the limitations in applied research timelines. Funding with an academic research framing requires new scientific innovation, and several SHEAR projects found it overly ambitious to try to undertake novel research and innovation as well as adopting and taking to scale research outcomes within a five-year research window. SHEAR consortia emphasized the importance of having research funding that enables innovation in adoption or the adaptation of research innovations. Some SHEAR teams considered the benefits of 5–10-year project horizons, to enable new cutting-edge science to be piloted and then applied at scale. Others cautioned the risk of project burnout in a longer research horizon and encouraged investment in distinct Phase 2 ‘application of research’ stages.

Other SHEAR teams highlighted opportunities for research focused on enabling stakeholders to better act upon existing data and risk information. Several teams noted a tension in feeling pressure to apply at scale new science that was not yet ready for application. SHEAR teams suggested a distinction between applied research in Phase 1 and the application of research in Phase 2. This means that Phase 1 would still focus on applied research, but with research as the main driver. Phase 2 would also still focus on research, but with the main driver being enabling the application of research innovations, including adaptation and adoption at scale. Several SHEAR teams emphasized the importance of the adaptation of products or solutions to each context, with challenges in finding research funding for adaptation and upscaling.

## Investment in capacity building

Teams recognized the value of modest funds for capacity building to build relationships with and understanding of key stakeholders. Others highlighted the value of investment in non-UK based PhD students, ensuring research projects fostered national capacities.

## Investment in cross-collaboration

SHEAR teams noted the opportunities to align UK-funded research with internationally funded research programmes, highlighting the need for flexible arrangements to enable cross-national research collaboration. Within the large SHEAR programme, teams emphasized the value of investment in smaller cross-project integration projects, enabling teams from different SHEAR projects to collaborate on cross-cutting workstreams.

Given the complex nature of interdisciplinary research, several projects noted the benefits in having a discrete project manager or coordination role separate to the research leadership or Principal Investigator (PI) role, especially in enabling effective internal and external cross-collaboration in multi-disciplinary teams.

SHEAR projects highlighted the added value of staff who held roles across different research projects, which was effective in aligning and building on complementarities between different projects and programmes. For example, shared staff were integral to coordinating efforts between SHEAR-funded [Forecast-based Preparedness Action \(ForPac\)](#), WISER-funded Developing Risk Awareness through Joint Action (DARAJA) and ‘Tomorrow’s Cities’ in Nairobi funded by the Global Challenges Research Fund (GCRF).