

# Global Challenges Research Fund

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### Summary

- Overview of GCRF
- Global and UK Context for development aid
- ODA
- GCRF activities
- Research agenda
- NERC context and activities



### Global Challenges Research Fund



Cutting edge research which addresses the problems faced by developing countries

Address global challenges through disciplinary and interdisciplinary research

☐ Strengthening capability for research and innovation, within developing countries and the UK

Agile response to emergencies and opportunities



### **Global Context**





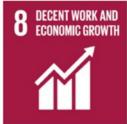
















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### **UK Context**

### **UK Aid Strategy**

- Strengthening global peace, security and governance
- Strengthening resilience and response to crises
- Promoting global prosperity
- ☐ Tackling extreme poverty and helping the world's most vulnerable

DFID 'Economic Development Strategy: prosperity, poverty and meeting global challenges'.





### Official Development Assistance





Countries on the Organisation for Economic Co-operation and Development (OECD) DAC list are eligible for ODA funding.

Any GCRF proposal must make it clear that its primary purpose is to promote the economic development and welfare of a developing country or countries



### GCRF/Newton ODA guidance

- Investigate a specific problem /seek specific outcome which will have an impact on a developing country (s) on the DAC list
- Provide evidence as to why this is a problem for the developing country or countries
- Address the issue identified effectively and efficiently
- Use the strengths of the UK to address the issue, working in collaboration with others as appropriate
- Demonstrate that the research is of an internationally excellent standard
- Identify appropriate pathways to impact to ensure that the developing country benefits from the research.

### GCRF activities update

- Developed the strategy (waiting for sign off)
- Established GCRF Strategic Advisory Group
- Worked closely with other GCRF delivery partners
- Overseas visits
- Run town hall meetings and call for evidence
- Stakeholder mapping
- Developed research agenda for enabling change
- First RCUK call capability building



### Research agenda for enabling change

#### Leave no one behind

to create new knowledge and drive innovation that helps to ensure that everyone across the globe can prosper through access to health, food, water, education, energy etc.

#### Sustainable societies and economies

to identify new responses to the challenges arising from changes in population, technology, consumption and pressure on the environment

### Support peace and justice

to understand how to strengthen the institutions that underpin peaceful societies, good governance, respect for human rights and the rule of law.

# Research agenda for change (1) Leave no one behind

Our vision is to create new knowledge and drive innovation that helps to ensure that everyone across the globe has access to:

- Secure and resilient food systems supported by sustainable marine resources and agriculture
- Sustainable health and well being
- Inclusive and equitable quality education
- Clean air, water and sanitation
- Affordable, reliable, sustainable energy



# Research agenda for change (2) Sustainable economies and societies

Our ambition is to identify new responses to the challenges arising from changes in population, technology, consumption and pressure on the environment:

- Sustainable livelihoods supported by strong foundations for inclusive economic growth and innovation
- Resilience and action on short-term environmental shocks and long-term environmental change
- Sustainable cities and communities
- Sustainable production and consumption, e.g. materials and other resources



## Research agenda for change (3) Support peace and justice

Our goal is to understand how to strengthen the institutions that underpin peaceful societies, good governance, respect for human rights and the rule of law. We need new insights to help:

- Understand and effectively respond to forced displacement and multiple refugee crises
- Reduce conflict and promote peace, justice and humanitarian action
- Reduce poverty and inequality, including gender inequalities



### GCRF Calls for proposals and future plans

#### First RCUK Collective Fund call

Growing Research Capability to Meet the Challenges Faced by Developing Countries (panel meeting 20/21st February)

Future activity across RCUK will include;

- growing capability
- thematic programmes from individual Councils
- agile response mechanisms
- global engagement and
- a large scale second collective fund call.

Future Research Council specific calls being developed



### **NERC**

### Official Development Assistance

- Aim: To strengthen resilience and response to crisis
- NERC's approach: Delivered over four years by Strategic Research (£25m) Discovery Science (£10m) and National Capability (£26m)
- GCRF, NERC core commitment (£8m per year)
   Newton Fund, DFID partnerships



# **GCRF- Building Resilience**Ambition



- **Build inter-disciplinary partnerships** to prepare communities for success in future GCRF collective fund calls.
- Build partnerships with 'users' (policy, NGOs, business) so they can have a key role in design, implementation and impact generation.
- Fund exploratory and pilot projects (which could include new research, as well as translation of existing knowledge) in preparation for larger investments later.



# GCRF- Building Resilience What was funded

- 29 projects, 9 month duration
- >£4M (NERC,ESRC, AHRC)
- Partners: Local &
   International NGO's (e.g.
   Oxfam, Tearfund; district
   authorities; DRM agencies

# MultipleHazards Flood Drought Coastal LandDegradation







# **GCRF- Building Resilience**

### Lessons Learned



#### Scope

 Greater focus would provide opportunity to target particular research communities.

#### Inter-disciplinarity

- Define it what is inter- multi- and trans-disciplinary?
- Many projects missed out or misunderstood disciplines, or they were 'bolt ons'.
- Encouraging inter-disciplinarity requires community building & incentives.
- Achieving it requires greater -shared- understanding of remits.
- Judging it requires realism (not cutting edge science across all remits) and a large panel.

#### Ethics:

 Definition and clarity over the importance of ethical considerations especially when working with vulnerable communities.

### **GCRF- Building Resilience**

### Lessons Learned



### Impact

- Achieving impact requires community building with in country academics and practitioners.
- Involvement of project partners can be facilitated by providing £ to enable collaboration.
- Judging the potential for impact requires 'user' specialists with 'in country' knowledge.

#### Working with in-country academic partners

- Can bring useful networks and links to local communities, policy-makers,
   NGOs etc.
- Requires clear definitions about what non-UK institutes are eligible for funding.
- Care over how the financial cap (at 30% of total project cost) is perceived.



# **GCRF- Building Resilience** Funded Proposals 1



PI/Institute	Title
Prof Angie Hart /U. Brighton	Patterns of resilience among young people in a community affected by drought: Historical and contextual perspectives
Dr Caroline Upton/U. Leicester	Resilient Pastoralism: Towards Sustainable Futures in Rangelands
Dr Anne Frederike Van Loon/U.Birmingham	CreativeDrought - Creative experiments for building resilience to future drought in Africa
Dr Evgenia Ilyinskaya/ U. Leeds	Unseen but not unfelt: resilience to persistent volcanic emissions (UNRESP). Case study from Masaya volcano, Nicaragua
Dr Mark Naylor/U. Edinburgh	Research for Emergency Aftershock Response (GCRF-REAR)
Prof Piran White/U. York	Building resilience along the Colombian Caribbean coast in the face of sudden and slow-onset environmental hazards
Prof Hugh Sinclair/U. Edinburgh	Dynamic Flood Topographies in the Terai, Nepal; community perception and resilience
Dr Harry Smith/Heriot-Watt	Resilience or resistance? Negotiated mitigation of landslide risks in informal settlements in Medellin
Prof Mark Pelling/Kings College	Why we Disagree about Resilience: epistemology, methodology and policy space for integrated disaster risk management
Prof Maureen Fordham/UCL	MANTRA: Increasing maternal and child health resilience before, during and after disasters using mobile technology in Nepal
Prof Duncan Quincey /U. Leeds	HARVEST: High-mountain Asia - building Resilience to water Variability using Experiments, Surveys and accounts of Tradition.

# **GCRF- Building Resilience** Funded Proposals 2



PI/Institute	Title Title
Dr John Twigg/ODI	Promoting Safer Building - Using science, technology, communication and humanitarian practice to support family and community self-recovery
Dr Eliza Calder/U. Edinburgh	Communication with Hazard Maps in Central America: A multidisciplinary science-media-community network (HazMap_CA)
Prof Gillian Bristow/Cardiff U.	Resilience In Groundwater Supply Systems: integrating resource-based approaches with agency, behaviour and choice in West Africa (RIGGS)
Professor William Blake/U. Plymouth	Socio-ecological resilience to soil erosion driven by extreme climatic events: past, present and future challenges in East Africa.
Prof Dominic Kniveton/U. Sussex	Building resilience and inclusion in Sub-Saharan Africa through social learning around climate risks
Dr Katerina Michaelides/U. Bristol	War Impact on Dryland Environments and Social-Ecological Resilience in Somalia (WIDER-SOMA)
Prof Sarah Elizabeth Metcalfe/U. Nottingham	From mangrove to milpa: what determines resilience to extreme weather events in the Yucatan Peninsula, Mexico?
Prof Qiuhua Liang/U. Newcastle	Building REsilience to Multi-source Flooding in South/Southeast Asia through a Technology-informed Community-based approacH (REMATCH)
Dr Rachel Gaulton/U. Newcastle	DRIER-China: Drought Resilience In Ecosystem services and Rural communities in China.
Dr Emily Wilkinson/ODI	Between a rock and a wet place: exploring historical trajectories of exposure, governance and tenure to build resilience to multiple hazards in SIDS
Dr Caroline Hattam/PML	Building Socio-Ecological Resilience to Coral Reef Degradation in the Islands of the Western Indian Ocean

# **NERC Innovation**

### Innovation programmes



**Environmental Risks** to Infrastructure Innovation Programme



Scottish

















Sainsbury's



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Elsoms

The Seed Specialists







































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# Thank you

# Any questions?

