Policy Briefing

UKCDR
UK Collaborative on Development Research

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POLICY POINTERS

Funders should:

Work with partners to increase the proportion of funding going to the least developed and low-income countries which are most vulnerable to the impacts of climate change, and to applied and systems-based research.

Further prioritise alignment and collaboration in their strategies to support climate and sustainable development goals in the context of budget constraints and in the longer timelines required to achieve some climate impacts.

Consider more flexible approaches to facilitate and incentivise partnerships to ensure that climate-development research is demand-driven, increasingly solutions-orientated and aligned with local priorities.

Continue to promote principles and practices of equity when building partnerships on a scale and in locations not previously achieved to meet climate-development goals.

Draw on lessons learned from COVID-19, seek further ministerial commitments on "greening" the recovery from COVID-19.

UK ODA and Wellcome-funded research on climate change and international development (2015-2020)

Understanding the relationship between climate change and international development is essential both to achieve the UN Sustainable Development Goals (SDGs) and to meet the terms of the 2015 Paris Agreement. The World Bank calculates that without climate-informed development 100 million additional people could be forced into poverty by 2030.[1] Poor and marginalised populations, Small Island Developing States and Low-Income Countries are among most vulnerable to the impacts of climate change.[2] Moreover, without innovation, developing countries are increasingly likely to contribute to climate change as they experience population increase, urbanisation and economic growth.

With countries around the world required to step up their ambitions at COP26, and with the impacts of climate change already becoming apparent in low-and middle-income countries (LMICs), it is increasingly important to understand the complex interactions between climate change and international development. Research is vital for identifying conditions under which both climate and development goals can be achieved, and to design strategies to maximise the synergies and minimise the trade-offs between the two.

UK research funders have a strong history of supporting research on climate change and international development. This briefing summarises the findings and recommendations of a review of UK Official Development Assistance (ODA) and Wellcome-funded research on climate change and international development, between 2015 and 2020. The review sets out the distribution of funding, examines some of its strengths, weaknesses and impacts, and looks ahead at gaps, opportunities and research priorities for the future. It also provides an early examination of the impacts of COVID-19 on the climate-development research landscape.

We used five main tools to map and analyse the climate-development research and funding landscape, delivered in consultation with a cross-funder steering group:

1. **Portfolio-level data analysis** of UK ODA and Wellcome-funded projects;
2. 30 key **stakeholder interviews** with UK and in-country research funders, academics, civil society members and policymakers;
3. A non-representative **survey** of members of the climate-development research community, completed by 282 respondents (of which half were based in LMICs);
4. Six **impact case studies**, selected to represent a range of geographies, research focuses, academic disciplines, impact types and research funders; and
5. A **consultation workshop** with representatives from research funders, academia, civil society, and policymakers to refine recommendations and reflect on the impact of COVID-19 on the research landscape.

Summary of key findings

A summary of key findings is below. The full key findings and analysis can be found in UKCDR's report, *The scope and reach of UK ODA and Wellcome-funded research on climate change and international development*.

The UK committed £564.2m into over 690 UK ODA and Wellcome-funded research projects on climate change and international development over five financial years (2015-2020). The total ODA contribution during this time was £535.1m across at least 651 projects, of which DFID[3] (49.3%) and BEIS (43.3%) were the largest funders. UKCDR estimates that this may represent more than a nine-fold increase in climate-development research funding since the period 2004-05 to 2007-08. Wellcome committed £29.1m across 44 projects.

Table 1: Total commitment of UK ODA and Wellcome climate-development research (initiated between 2015-16 and 2019-20)

Funder	Number of Projects	Amount Awarded
BEIS	549	£231.6m
AMS	*12*	*£362k*
British Academy	*18*	*£2.9m*
British Council	*313*	*£13.9m*
Met Office	*TBC*	*TBC*
Royal Society	*57*	*£9.2m*
UKRI	*140*	*£154.4m*
UK Space Agency	*9*	*£50.8m*
DEFRA	≥ 3*	£36.0m
DFID	≥ 96*	£263.8m
DHSC†	3	£3.7m
Wellcome†	44	£29.1m
Total: ODA only	**651**	**£535.1m**
Total: ODA and Wellcome	**694**	**£564.2m**

Totals may not add up due to rounding

* Total number of individual research projects could be obtained by neither DEFRA nor DFID

† Total includes one research project jointly funded by DHSC and Wellcome totalling £308k

A total of 111 countries were identified as partners in these research projects and/or primary intended beneficiaries, most commonly China (123 research projects), India (88), Kenya (69), Egypt (53) and Brazil (48). A total of 616 institutions from 64 countries were involved in these projects, of which 59% were based in LMICs, mostly within middle-income countries. UK-based institutions were the lead on 592 of the 694 research projects. Excluding SDGs which are relevant to all climate-development research projects analysed (for example SDG 1: No poverty and SDG 13: Climate action), the greatest amount of funding during this period went to research projects which aligned with SDG 2: Zero hunger (£210.7m), and the greatest number of projects aligned with SDG 7: Affordable and clean energy (at least 300 projects).

Impacts seen to arise from UK-funded research include influencing thinking, policy impact, research capacity strengthening and the global standing of UK research. Over 80% of survey respondents agreed or strongly agreed that UK-funded research had addressed important knowledge gaps, although many highlighted the challenges of measuring and evaluating impact. UKCDR's case studies illustrate some of the many ways that research has had impact over the last five years, including tools to inform policy, nationally determined contributions and UK funder decision-making; community engagement through co-design and co-production; and bringing together technologies to improve knowledge of rainfall variability. Funding has also continued to support the UK's global standing for research excellence, with the UK second only to the USA in authorship for the IPCC 6th Assessment Report.

> **"[The UK has a] Full pantheon of expertise in climate change across spectrum from modelling, tipping points right the way through to understanding social, cultural and human dynamics."**
>
> UK academic

Mutual partnerships and openness to collaboration are key strengths of UK-funded research. Other strengths raised frequently by interviewees include the UK's global agenda, reputational and thought leadership; thematic expertise, particularly in climate sciences; research capacity strengthening; and the UK's profile on committees, panels and networks, particularly the IPCC. Survey respondents emphasised strengths around the strategic focus, significance and management of research funding, and the developing country orientation of UK-funded research.

Areas highlighted for further improvement include **understanding and aligning research to local contexts in practice** and the **sustainability of the research funding cycle.** Challenges include ensuring local perspectives are included at an early stage in research development, conducting research in areas with the most vulnerable communities, and translating research to impact when technologies are deployed on the ground. Short funding cycles can reduce the time available to build equitable partnerships required to co-design research and to embed and sustain outcomes. This can be a barrier when climate impacts are expected among populations where existing research relationships may not be present.

Demand for mitigation, adaptation, disaster risk reduction, energy and food systems were the most commonly cited research priorities. The breadth and diversity of research demand illustrates both the cross-cutting nature of climate change and the crucial role of funder collaboration to maximise research impact. Box 1 explores this demand in more detail. Enabling factors for UK-funded research meeting demand included partnerships and collaborations between research disciplines and with in-country actors, and monitoring and evaluation to understand the extent to which research impact met demand and to feed lessons learned into future project design.

The COVID-19 pandemic requires the research community to align further to maximise impact with limited resources, and presents opportunities for research to promote a low-carbon recovery, behaviour change, resilience, and to shift research leadership to in-country teams. COVID-19 has brought to the fore the links between the environment, health and development, has magnified the vulnerability of some communities. Research has a crucial role to play in identifying the conditions under which objectives on COVID, climate and development can be achieved and devising strategies to maximise synergies and minimise trade-offs between them.

> **"Through this [CIRCLE] programme, almost 100 postdoc fellows have been trained in different areas of climate impact. Many of them have risen to senior positions in climate research on this continent. It was a very successful programme, it was funded by DFID and received a really good impact levels and assessment at the end."**
>
> Interviewee from regional network, Africa

Box 1. Demand for further research

Research themes:

- Most commonly cited: Mitigation, adaptation, disaster risk reduction, energy and food systems.
- Survey respondents from high-income countries were most likely to prioritise research on energy, while those from middle-income countries and low-income countries were most likely to prioritise food systems and adaptation respectively.
- Other prominent themes included: climate finance and economic mechanisms; natural resource management and nature-based solutions; climate science; water; sustainable development; health; and meeting international commitments such as the SDGs and Paris Agreement.
- COVID-19 was identified as the greatest emerging and future research demand area, in a broader context of increased focus on the many intersections between health, climate and biodiversity.

Research mechanisms and enablers:

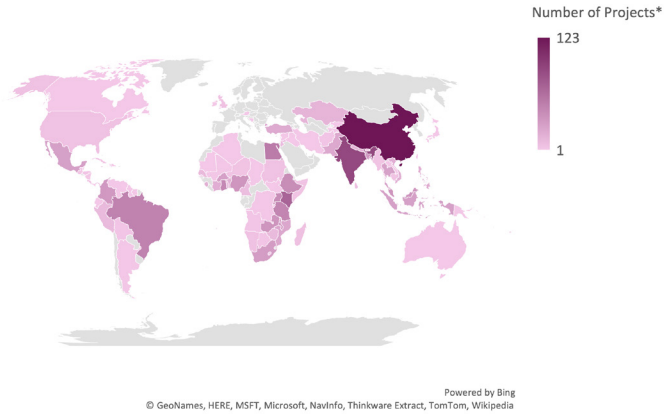
- Most commonly cited: Aligning research with policy and practice, and producing context-specific research to maximise impact where it is needed most.
- Others prominent mechanisms included: technology development and innovation; capacity strengthening; responding to demand for data and knowledge gaps; and enabling knowledge exchange.
- Applied or solutions-based research is increasingly important to maximise effective action in the limited timeframe to respond to climate change.

Summary of recommendations to research funders

A summary of recommendations to research funders is below. The full recommendations can be found in UKCDR's report.

Gaps in demand. Work with partners to increase the proportion of funding going to the least developed and low-income countries which are most vulnerable to the impacts of climate change, and direct greater funding to applied, systems-based and solutions-driven research. Currently, more UK-funded climate change research projects are directed towards middle-income countries, reflecting their more advanced research capacities and established track records of climate change relative to other LMICs. Research funders should look at opportunities to directing a greater proportion of research funding and capacity building activities towards the least developed and low-income countries – especially fragile states, small island states and areas most vulnerable to the impacts of climate change. Research funders should also explore opportunities to fund more applied or solutions-driven research. While descriptive research, needs assessments and pilot studies still have important roles to play, there is increased demand for research that maximises effective action in the limited time available for climate action. This research will often be transdisciplinary, promote systems-based thinking and seek to bridge the existing gaps between climate adaptation and mitigation, reflecting the complexity of needing to reduce global emissions and respond to climate change simultaneously.

Figure 1: Partners in research projects and/or primary intended beneficiaries of UK ODA and Wellcome-funded climate-development research (initiated between 2015-16 and 2019-20)



Individual research projects may have multiple countries of focus.

* Total number of individual research projects could not be obtained by either DEFRA or DFID and information on specific countries could not be obtained by DEFRA.

UK-led coordination. Further prioritise alignment and collaboration in funder strategies to support climate and sustainable development goals in the context of budgetary constraints and in the longer timelines required to achieve some climate impacts. Reductions to the UK ODA budget coincide with the need for urgent and widespread action on climate change, including in low-resource settings, as well as the forthcoming COP26 and commitments on the SDGs and Paris Agreement. Research has a crucial role to play in maximising the impact of this reduced budget and in identifying the conditions under which those goals can be achieved. It is essential to maximise the synergies between international development research funders' strategies and priorities on climate change and improve coordination both nationally and with international funders to maximise alignment and minimise duplication.

Partnerships. Consider more flexible approaches to facilitate and incentivise partnerships on a scale and in the locations needed to ensure that climate-development research is demand-driven and aligned with local priorities. New partnerships and relationships are required to align research with the areas of greatest need and to form the transdisciplinary approaches required to meet the demand for solutions-orientated research. While funding which promotes partnerships with researchers in LMICs is welcome, climate-development research requires a wider range of partnerships including local communities, governments, NGOs, the private sector and other stakeholders. Funders should consider ways of incentivising and coordinating new and needed partnerships, including "South-South" partnerships where suitable, and consider longer or more flexible funding cycles where possible to help researchers to identify, develop and maintain relationships which are essential to delivering research to inform policy and practice. UK researchers can make use of the SIN network, Research and Innovation Hubs and embassies to identify and make links to in-country actors. Communications to influence and engage with policymakers and communities should be built in from the start, with funding set aside for facilitating connections.

Equity. Continue to promote equitable partnerships when conducting research on a scale and in locations required to meet climate-development goals. New partnerships, including in fragile environments and with vulnerable populations, make considerations of equity more important than ever. UKCDR produces several resources to support the development of equitable partnerships[4] and is currently working on best practice guidance for implementation in research.

COVID-19. Draw on lessons learned from COVID-19, seek further ministerial commitments to "greening" the recovery from COVID-19. Research is central to a climate-compatible recovery from COVID-19 and ensuring that commitments to "build back better" from the pandemic benefit some of the most vulnerable communities which are often most adversely affected by both COVID and climate change. The research community should seek to secure further ministerial commitments for ongoing action on climate change and development, and COP26 presents an opportunity for this. Researchers and funders should draw on learnings from COVID-19 which are relevant to climate change, particularly on behaviour change, risk reduction in varied local contexts, accessing vulnerable communities, low-carbon research methods, translating research into policy, and agile, solutions-focused research. Funders should also explore ways to mitigate the impact of lockdown on the careers of certain groups, such as early career researchers, caregivers and those with limited technological access, to maximise the ongoing health and diversity of the climate-development research community.

Endnotes

1 https://www.worldbank.org/en/news/feature/2015/11/08/rapid-climate-informed-development-needed-to-keep-climate-change-from-pushing-more-than-100-million-people-into-poverty-by-2030

2 https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report-2020-Chapter-3.pdf

3 The funding data includes data up to March 2020, prior to the Department for International Development (DFID) merger with the Foreign and Commonwealth Office (FCO) to form FCDO. The portfolio-level funding analysis therefore refers to DFID, while any references to activities since the September 2020 merger will refer to FCDO.

4 Equitable Partnerships Resource Hub | UKCDR

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This briefing was developed in under the guidance of UKCDR members.

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