

## **Development Frontiers: enabling innovation and risk in international development research**

Securing meaningful sustainable development for all will need things to be done differently – from global frameworks, to national policies, to community-level action. New perspectives and novel solutions are needed. Research has a critical role to play in breaking down existing ways of thinking about sustainability and development and reformulating them in ways that could prove transformative. To do this will require new approaches that transcend and transect traditional boundaries – geographic, disciplinary, and methodological – as well as strong new alliances that bridge the research/practice divide. Funding this kind of research also requires a different approach that can balance excellence through rigour and competition with the desire to generate genuine collaboration and space for different voices.

A new funding opportunity being planned within a decade-long partnership between the UK's Economic and Social Research Council (ESRC) and Department for International Development (DFID) aims to place innovation and appetite for risk at the centre of world-class research that addresses the 'wicked problem' posed by sustainable development. This document sets out the rationale and approach to this 'Development Frontiers' call so far, as part of ongoing efforts to consult and generate feedback that can inform its final shape.

### **The 'wicked problem' of poverty, sustainability and fragility**

The new global development framework adopted in September 2015 has been widely hailed for setting ambitious targets for 2030. At the heart of the new sustainable development goals (SDGs) and their framework are the umbilical links between poverty reduction, environmental sustainability, injustice and inequality. Thus, the over-arching goal is to reduce poverty and improve human welfare, while simultaneously delivering major reductions in carbon pollution and otherwise safeguarding the natural environment. Importantly, the new goals apply to all countries, regardless of income; and, because poverty and environment both have trans-boundary elements, to the global community as a whole. The scale of transformation required poses an unprecedented challenge to policymakers. There will be some options which are indubitably win-win for both poverty and the environment, but even in these cases there will be questions about cost and sequencing. In many other cases, there will be harder choices and trade-offs, as the different interests of sectors, geographies, genders, age-groups and social classes come into play.

The new UK Aid Strategy

([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/478834/ODA\\_strategy\\_final\\_web\\_0905.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478834/ODA_strategy_final_web_0905.pdf)) strengthens commitment to addressing some of today's biggest global challenges, including promoting prosperity and tackling extreme poverty, as

well as strengthening peace, security and governance, resilience, and response to crises. Significantly, the strategy recognizes the need to address the relationship between these challenges. Efforts to address climate change relate mutually to both governance arrangements and economic structures that may create incentives and opportunities for positive action at local, national and global levels. The economic challenges of addressing growth and prosperity – while simultaneously ensuring we tackle extreme poverty, leave no one behind, and deal with environmental sustainability – are immense. The challenge is particularly acute in fragile and conflict affected countries.

Climate stresses, including rising global temperatures, changing patterns of precipitation, climbing sea levels and more extreme weather events, will intensify the challenge of global poverty, hunger and instability. Conflict and fragility are also significant challenges not only to international peace and security but to achieving the SDGs. Fragile countries, meaning those that are unable or unwilling to address poverty, account for a fifth of the total population of developing countries, but they include a third of those living in extreme poverty, half of the children who are not in primary school, and half of the children who will die before their fifth birthday. Local and regional conflict is becoming more common, fuelled, for example, by resistance to central authority. Civilians account for the majority of those adversely affected, and women and children are particularly vulnerable. There is some evidence of a link between climate change and increased conflict. However, while this may be so, the concern here is with wider questions of environmental sustainability and its impact on and implications for poverty reduction, which are clearly also exacerbated in countries that may not be in active conflict but are unable or unwilling to address poverty in all its aspects. In such circumstances poor institutional capacity, weak governance and oppressive political regimes amounting to ‘state fragility’ present very real obstacles to achieving positive transformations towards poverty reduction and environmental sustainability.

Managing such transformations is a classic ‘wicked problem’. It requires the deep engagement of policy-makers, supported by research which is broad in scope, multidisciplinary, theoretically grounded, and policy-relevant. Research will need to range from global to local, be sensitive to context, but also sufficiently robust to generate general lessons. It will need to offer new ways to tackle the challenges head-on, and be both strategic and catalytic in terms of influencing positive policy and programme change. It is this kind of pioneering, innovative, and potentially higher risk social science-led research that the Development Frontiers scheme aims to fund.

## **Development Frontiers: promoting innovation in development research**

Over the last decade, the ESRC-DFID Joint Fund for Poverty Alleviation Research has funded more than 125 research projects designed to bring the highest quality social science research to bear on the challenge of reducing poverty amongst the poorest countries and peoples of the world. Tackling issues from legislation to health, from inequality to the environment, and from economic development to agriculture, the wide-ranging portfolio of funded research has made a clear and sustained contribution both to scientific knowledge and also to policy and practice in low income countries (LICs) and beyond. But in the latest phase of the Joint Fund it was recognised that more conventional research funding schemes may not necessarily provide the best support for innovative, interdisciplinary research. Inherently higher risk, but potentially higher reward, such research might pioneer

theoretical or methodological innovation, engage a range of perspectives within and across academic disciplines, and foster creative partnerships between those who might not normally work together, including between academics and practitioners. Emerging evidence on such research suggests that it could offer the potential to radically impact on sustainable development concepts or practices, or lead to new thinking and action on poverty reduction.

The Development Frontiers scheme was set up as a part of the Joint Fund to specifically provide space for this kind of research. In the first call, seven 18-month grants were funded covering a wide range of topics, four of which were subsequently awarded a second stage of additional funding. For the second call, however, the funders agreed to revisit not only the scope of the call and how it promotes and supports innovation, but also the process through which research was commissioned. For call 2, we are working to further develop the space for innovation within the commissioning process, to create room for cooperation, and to enable the kinds of creative partnerships and collaborations that have the potential to transform thinking and lead to innovative solutions to critical challenges to sustainable development.

Consultation and dialogue is a crucial element within the process of commissioning this research. We are therefore beginning with an initial workshop and forum for discussion of the scope, focus and nature of research that could respond to the theme for the call. This will be followed by a wider public consultation designed to allow the broader research and policy communities to play an active role in refining the scope and focus of the call. Ultimately we will be looking for researchers and others to take part in an interactive and multi-staged proposal development process. This will bring together diverse perspectives and knowledges in new and innovative ways to generate research projects that would likely not have emerged through a more traditional commissioning mechanism. Open to researchers from around the world, and intended to draw on input from well beyond the ‘usual suspects’, up to £2.5million of ESRC and DFID funding is available for this call.

### **Refining the call focus: identifying spaces for innovation**

Arguably the greatest global environmental sustainability challenge that will impact on poverty reduction efforts is climate change. The overarching thematic focus of the Joint Fund intersects with several key research concerns relating to climate change in low income contexts, and mapping these helps to help identify where Frontiers research could make a valuable contribution. The diagram below captures these research themes and their intersections: real value could come from looking more closely at the vertical as well as horizontal interconnections between and within the themes.

<b>Climate change research</b>	<b>Intersections</b>	<b>Joint Fund research theme</b>
Impact of mitigation, adaptation and transformation strategies on income and livelihoods		Understanding and sustainably addressing people’s pathways into and out of poverty
Local, national and global institutions and their impacts on efforts to address climate		Understanding and promoting the political and institutional conditions that can effectively reduce poverty
Understanding the extent to which fragility and conflict exacerbate vulnerability to		Understanding and supporting efforts to reduce the risks and impact of violence and instability on the poorest in fragile

On the **vertical** axis, for the Joint Fund there is an important set of relationships between understanding sustainable poverty reduction and designing effective responses; how political, institutional or social conditions (including social norms and ideology) affect this; and how contexts of fragility or vulnerability shape political or institutional responses and further define what a sustainable pathway out of poverty might look like. Policy is a key cross-cutting theme, relating to sectors like education, health, social protection, economic growth, energy, urban planning, transport and agriculture. In a similar way, action taken to deal with climate change will have major impacts on the livelihood opportunities of poor (and rich) people. Major structural transformations will be superimposed on others associated with the development process itself, including inter-sectoral shifts, urbanisation, and integration into the world economy. The impact of these shifts on the poor will be shaped by political and institutional responses (locally, nationally and internationally), and will again differ in conflict or fragile contexts, resulting in more or less resilience.

On the **horizontal** axis there are clear relationships between mitigation and adaptation strategies, sustainable pathways out of poverty and the extent of resilience. Similarly there is a direct read-across between the impacts of climate change on poverty and institutional and political responses. Questions of vulnerability in conflict are central to both poverty and climate change.

## **Next steps**

We know there are existing research programmes which speak to some of these intersections – including those set out in Annex 1 – but there remain some questions, some ‘wicked problems’, for which social science could make a valuable, and perhaps even invaluable, contribution. Refining these spaces of interest is the next step, and requires diverse input to answer critical questions:

In the broad field set out above, what problems are just wicked enough that Frontiers research can make a substantive and sustained difference to tackling them? Where could a relatively small scale investment act as a real catalyst for change? What ground is already well covered and should be avoided? Without diminishing the importance of local context, how can we stimulate theoretical advances to make research insights more generalisable?

What needs to be done differently to generate and deliver this kind of research? What are the risks involved and when do they become too high? What kinds of partnerships and projects are most likely to succeed and how can they be facilitated? What are the barriers to genuine interdisciplinary research, and how can these be overcome? What is the best way meaningfully to engage practitioners in the design, conduct and uptake of such research?

## Annex I: Current research funding landscape

We are interested in the space for social science led research to explore the intersections between poverty; climate change; and conflict/fragility.

We know there are other research programmes which cut across some or all of these areas. However, a brief desk-based survey of existing programmes, calls and schemes shows that there is space at the intersection of the three themes that appears less populated. While not exhaustive, this information, gathered from funder / programme websites, gives a useful point of departure for identifying suitable terrain for the Frontiers call.

Key:

-  Poverty
-  Climate change/environmental sustainability
-  Conflict/fragility

Name/link	Funder	Type	Key aim	Poverty / Climate / Conflict
<p>Improved water resource management, increased access to clean water and basic sanitation</p> <p><a href="http://www.sida.se/English/how-we-work/our-fields-of-work/sustainable-societal-development/water-resource-management/">http://www.sida.se/English/how-we-work/our-fields-of-work/sustainable-societal-development/water-resource-management/</a></p> <p><a href="http://www.sida.se/English/how-we-work/our-fields-of-work/sustainable-societal-development/water-and-sanitation/">http://www.sida.se/English/how-we-work/our-fields-of-work/sustainable-societal-development/water-and-sanitation/</a></p>	SIDA	Bilateral support, interventions and service provision	To develop an ecological and sustainable way of thinking about water and sanitation for the benefit not only of health and wellbeing but also poverty reduction and economic development, taking into consideration dimensions of conflict.	

<p>Conflict and Cooperation in the Management of Climate Change (CCMCC)</p> <p><a href="http://www.nwo.nl/en/research-and-results/programmes/Conflict%2Band%2BCooperation%2Bover%2BNatural%2BResources%2Bin%2BDeveloping%2BCountries%2B%28CoCoon%29/background">http://www.nwo.nl/en/research-and-results/programmes/Conflict%2Band%2BCooperation%2Bover%2BNatural%2BResources%2Bin%2BDeveloping%2BCountries%2B%28CoCoon%29/background</a></p>	<p>NWO/ DFID</p>	<p>Research programme</p>	<p>To develop insights into the effects that the scarcity, degradation or abundance of natural resources can have on populations, including potential conflicts that may ensue.</p>	
<p>Ecosystem Services for Poverty Alleviation (ESPA)</p> <p><a href="http://www.espa.ac.uk/">http://www.espa.ac.uk/</a></p>	<p>DFID/ NERC/ ESRC</p>	<p>Research programme</p>	<p>To deliver high-quality, cutting-edge research that will improve understanding of the way ecosystems function, the services they provide and their relationship with the political economy and sustainable growth.</p>	
<p>Social, Technological and Environmental Pathways to Sustainability (STEPS) Centre</p> <p><a href="http://steps-centre.org/">http://steps-centre.org/</a></p>	<p>ESRC</p>	<p>Interdisciplinary global research and policy engagement centre</p>	<p>To address two vital global challenges through interdisciplinary research: linking environmental sustainability with better livelihoods and health for poor people; and helping science and technology work for poverty reduction and social justice.</p>	

<p>Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA)</p> <p><a href="http://www.idrc.ca/EN/AboutUs/Donor_Partnerships/CARIAA/Pages/default.aspx">http://www.idrc.ca/EN/AboutUs/Donor_Partnerships/CARIAA/Pages/default.aspx</a></p>	IDRC/ DFID	Five year research programme	To build the resilience of vulnerable populations and their livelihoods in three climate change 'hot spots' through research and policy engagement.	
<p>Future Climate for Africa (FCFA)</p> <p><a href="http://www.nerc.ac.uk/research/funded/programmes/fcfa/#xcollapse2">http://www.nerc.ac.uk/research/funded/programmes/fcfa/#xcollapse2</a></p>	NERC/ DFID	Five year research programme	To improve climate risk management and protection of lives and livelihoods.	
<p>Environment and Climate Change Fund: Rwanda (FONERWA)</p> <p><a href="https://www.gov.uk/international-development-funding/environment-and-climate-change-fund">https://www.gov.uk/international-development-funding/environment-and-climate-change-fund</a></p>	DFID	Cross-sectoral financing mechanism	To help the Government of Rwanda achieve low carbon, climate resilient growth by providing technical assistance for the management of a national fund for environment and climate change.	
<p>Environment and Global Climate Change</p> <p><a href="https://www.usaid.gov/what-we-do/environment-and-global-climate-change">https://www.usaid.gov/what-we-do/environment-and-global-climate-change</a></p>	USAID	Five Global Climate programmes	To help communities better manage and benefit from their natural resources.	
<p>US Global Development Lab</p> <p><a href="https://www.usaid.gov/GlobalDevLab/about">https://www.usaid.gov/GlobalDevLab/about</a></p>	USAID	Five Centres and two Offices	To accelerate development impact faster, cheaper and more sustainably through science, technology, innovation and partnership.	

<p>Environment for Development Initiative (EfD)</p> <p><a href="http://www.efdinitiative.org/">http://www.efdinitiative.org/</a></p>	<p>SIDA/ World Bank</p>	<p>10 year capacity building programme</p>	<p>To develop sustainable economic growth founded on efficient management of ecosystems, natural resources and climate change impacts through a capacity building programme in environmental economics.</p>	
<p>South Asian Network for Development and Environmental Economics</p> <p><a href="http://www.idrc.ca/EN/Programs/Agriculture_and_the_Environment/Environmental_Economics/Pages/ProjectDetails.aspx?ProjectNumber=107446">http://www.idrc.ca/EN/Programs/Agriculture_and_the_Environment/Environmental_Economics/Pages/ProjectDetails.aspx?ProjectNumber=107446</a></p>	<p>IDRC/ SIDA/ NORAD</p>	<p>Three year research programme (current phase)</p>	<p>To enhance environmental economics research capacity in South Asia through a program of research grants, training and networking.</p>	
<p>International Growth Centre (ICG)</p> <p><a href="http://www.theigc.org/">http://www.theigc.org/</a></p>	<p>DFID</p>	<p>Centre for research, est. 2008</p>	<p>To promote sustainable economic growth in developing countries by providing demand-led policy advice based on frontier research.</p>	
<p>Growth Research Programme (DEGRP)</p> <p><a href="http://www.esrc.ac.uk/research/international-research/international-development/dfid-esrc-growth-research-programme-degrp/">http://www.esrc.ac.uk/research/international-research/international-development/dfid-esrc-growth-research-programme-degrp/</a></p>	<p>ESRC/ DFID</p>	<p>Research programme, currently in Phase I (4 calls)</p>	<p>To strengthen evidence-based policymaking that contributes to inclusive and economically sustainable growth and poverty reduction in LICs through social science research.</p>	

<p>Supporting Economic Transformations (SET)</p> <p><a href="http://set.odi.org/">http://set.odi.org/</a></p>	<p>DFID</p>	<p>Policy support to governments and their partners</p>	<p>To support economic transformation in developing countries through research, which is a central part of the narrative between growth and poverty reduction.</p>	
<p>Drivers of variability in the South Asia Monsoon</p> <p><a href="http://www.nerc.ac.uk/research/funded/programmes/monsoon/">http://www.nerc.ac.uk/research/funded/programmes/monsoon/</a></p>	<p>NERC/ MoES/ UK Met Office</p>	<p>Five year research programme</p>	<p>To improve understanding of the variability of the South Asian monsoon based on collaborative research between UK and India.</p>	
<p>Climate services, predictability and interregional linkages</p> <p><a href="http://www.nerc.ac.uk/research/partnerships/belmont/climate/">http://www.nerc.ac.uk/research/partnerships/belmont/climate/</a></p>	<p>NERC/ Belmont Forum/ JPI Climate</p>	<p>Five year research programme</p>	<p>To contribute to the overall challenge of developing climate services with a focus on interregional linkages in climate variability and predictability.</p>	