

Promoting innovation and evidence-based approaches to building resilience and responding to humanitarian crises:

A DFID Strategy Paper



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Executive Summary

Background and overview

The Humanitarian Emergency Response Review (HERR), commissioned by the Secretary of State for International Development and independently overseen by Lord Ashdown, called for a transformation in the way DFID and the wider global community approach the humanitarian agenda. To deliver this transformation it will be critical to build a strong understanding of the scale and nature of the challenges we face; to establish which of our current approaches are most likely to work; and to find and test new and innovative ways to effectively tackle the challenges of the future.

As part of its response to the HERR, the Coalition Government agreed to include humanitarian issues as a **core part of DFID's research and evidence work**, and to use innovative techniques and technologies in its humanitarian response. This strategy sets out how the Government plans to deliver on these commitments.

The strategy is set against the context of DFID's commitment to go beyond a focus on responding to crises, and to invest in approaches that promote **resilience**. A core part of the strategy is to work with policy-makers and practitioners to deepen their understanding of the concept and application of resilience, particularly in fragile and conflict-affected situations.

Bringing together multiple capabilities

DFID is well positioned to support innovation and promote more evidence-based responses. It has a significant operational presence and policy influence, and a strong track record in commissioning and managing policy-relevant research. More broadly, the UK has a strong capability in this area across Government, and in the academic and business communities.

A framework for investment: Four big problems

We will concentrate our efforts around tackling four big problems to which we aim to bring new evidence and ideas.

One: Decision-makers do not have routine access to good information about risk.

Such information is vital if we are to mobilise political attention and resources in support of resilience and know where investments in disaster risk management should be targeted. High quality evidence is also integral to the ability of communities to hold those responsible for managing risk to account.

Proposed approach: The proposed approach is designed to enable decision-makers to access and use existing risk models to inform resource allocation and programming. We will work with the insurance risk industry and others to support the development of risk models that can integrate analysis of different risks, and help us to identify who is most likely to be affected by different hazards. We will also invest in approaches that encourage more standardised and systematic reporting of disaster losses.

Two: We don't really know which interventions are most effective in reducing risk, saving lives and rebuilding livelihoods after crises. Although the incentives to support innovation are not always in place, there is also a need to develop new approaches if we are to meet increasing demand for humanitarian support in a context of resource scarcity.

Proposed approach: There are two main strands of work proposed. First, we will commission research and evaluation to find out which of our existing interventions are most effective and to assess their relative costs and benefits. Second, we will promote and support innovation, including further testing of promising interventions at scale. We will place a particular emphasis on further testing of cash-based approaches and other risk-sharing mechanisms, including insurance.

Three: The capacity to design and deliver humanitarian response and to build resilience is already stretched and will become increasingly overwhelmed. To date, we have relied heavily upon the international community to provide support to disaster-prone communities. But international systems are already stretched. National governments have the primary responsibility to meet the needs of their populations, and national and local institutions are critical to first line response. We know that populations are most vulnerable where the institutional framework to manage risk is weakest, and where bad politics and conflict further deepen vulnerability. So what are the best ways of supporting national and local institutions to build resilience and manage humanitarian response?

Proposed approach: We propose to build the evidence base regarding how to build the capacity of national institutions to promote resilience and mount effective humanitarian response. We will be particularly concerned to understand how international actors can use instruments such as budget support and climate financing in this respect. Also of concern will be to identify the best ways of reaching communities living in the most insecure and fragile environments.

Four: The right systems and incentives are not in place to ensure that evidence is available and used to inform decision-making. At present, humanitarian decisions are often based on poor information. In planning an emergency response we do not know with confidence how many people are affected, whether they are women or men, or how old they are. This weak baseline undermines the scope for robust monitoring and evaluation that can tell us whether what we are doing is making an impact. It is extremely difficult for practitioners to access information about good practice in order to improve their own effectiveness, because information is scattered and is not available in a consistent format.

Proposed approach: We will use our influence with our major operational partners – multilateral and NGO – to push for improvements in the quality and use of data in decision-making. We will invest in initiatives that ensure that practitioners on the ground can access the information they need to select the best interventions. We will further strengthen our own evaluation of humanitarian action to improve lesson learning and deepen accountability, especially to beneficiaries.

Results

As a result of these proposed approaches we expect:

- Decision-makers in developing countries and internationally to invest more in building resilience, because they better understand the nature and scale of increasing risk and losses, and are able to access tested solutions.
- More effective and efficient humanitarian responses when crises occur, because we can be more confident about which interventions really work.
- New products and processes identified that are more cost-effective than existing approaches, allowing more people to be reached with the most effective kinds of support.
- More routine use of high quality data and evidence to inform decision-making at all levels, from decisions about individual projects and operations to decisions about global approaches. This will help ensure that resources are targeted more precisely and allow us to track the outcomes and impacts of our work, deepening accountability to disaster-prone communities and to British tax-payers.
- Increased ability of people living in developing countries – within national and local government, and within civil society – to lead evidence-based efforts to build resilience and to mount their own responses when disaster strikes.

Working in partnership

In delivering this strategy we will work across Government, and in partnership with the private sector and academic community. We will also work closely with other donors, including with the Humanitarian Aid and Civil Protection department of the European Commission (ECHO).

1. Introduction

The Humanitarian Emergency Response Review (HERR), called for a transformation in the way in which the Coalition Government and the wider global community approach the humanitarian agenda.

It set out how a range of environmental, demographic and political trends are converging, posing an increasing threat to life and to long-term development opportunities, particularly in poor countries. It argued for a step change in the way in which DFID understands and responds to this changed risk environment.

In addition to encouraging a fundamental review of the way in which the Coalition Government anticipates and responds to crises, it argued that increasing resilience should be a fundamental objective of **all** of DFID's work – developmental, as well as humanitarian. It challenged DFID to put disaster risk management and humanitarian action at the core of its work.

The HERR emphasised the importance of strong **leadership** internationally and nationally, and of ensuring that we have the skills available and incentives in place to improve our response to disasters and emergencies. It also called for a deepening and broadening of its **partnerships** – including with the private sector.

The Review identified the need to **open up humanitarian space**, so that aid reaches those most in need, in particular in the most insecure environments. It also encouraged DFID and others to put **accountability at the heart of the humanitarian enterprise** - accountability to those affected by crises, and to donors.

The HERR underscored the importance of **innovation** in ways of thinking and of doing, and consistent across the report was the emphasis on improving the evidence base underpinning humanitarian action.

As part of its response to the HERR, the Secretary of State agreed:

- i. to make research and innovation a core part of DFID's research and evidence work; and
- ii. to use innovative techniques and technologies more routinely in humanitarian response¹.

This paper sets out how DFID plans to deliver on these commitments.

The remainder of the paper comprises three parts. Section 2 sets out the aims and objectives of the strategy and locates the strategy in the wider context of DFID's response to the HERR and its approach to innovation and evidence-based practice. Section 3 identifies four big problems around which we propose to concentrate our efforts. Section 4 describes how the policy will be delivered.

¹ Humanitarian Emergency Response Review: UK Government Response. p11

2. Aim, objectives and approach

2.1. Aim and Objectives

This strategy aims to identify the most effective ways of building resilience and of saving lives in crises.

The objectives are to enable decision-makers – disaster-prone communities, national governmental and non-governmental actors and international agencies including donors - to:

- i. Access and use analysis of the risks they face;
- ii. Identify the most effective ways to build resilience and respond to crises;
- iii. Find ways of ensuring that more poor people, particularly those living in the most insecure environments, benefit from efforts to increase resilience and receive help when needed; and
- iv. Access useful and reliable evidence to inform decisions, and to hold others to account.

2.2. Approach

There are two key starting points for this strategy. First, DFID's approach to resilience. Second, its approach to evidence and innovation. This section explains how we interpret these concepts and how we aim to bring them together through our work on policy, at country level and by commissioning new research.

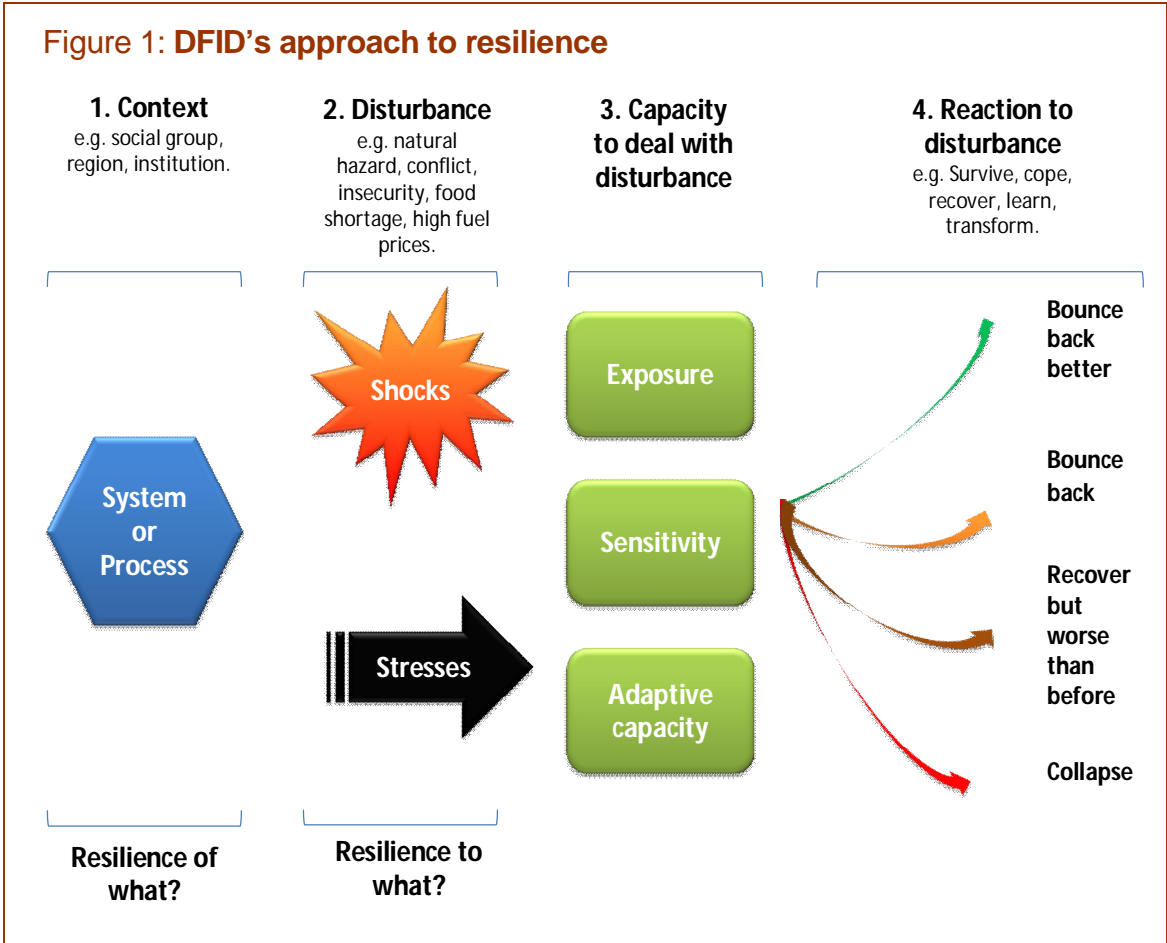
2.2.1. Building resilience, improving response

The UK Government's Humanitarian Policy *Saving Lives, Preventing Suffering and Building resilience* commits to making resilience central to our work. DFID defines resilience as:

The ability of countries, communities and household to manage change by maintaining or transforming living standards in the face of shocks or stresses without compromising their long term prospects.²

In November 2011, DFID agreed an approach to disaster resilience, which is summarised on the following page (Figure 1).

² Defining disaster resilience: A DFID approach paper (add weblink)



The approach sets out a framework to analyse how communities and countries are subject to shocks and stresses and to assess their capacity to cope with such disturbances. This ability to cope is shaped by three factors: exposure; sensitivity; and adaptive capacity³.

Exposure to risk is an assessment of the magnitude and frequency of shocks or the degree of stress.

Sensitivity (sometimes known as vulnerability) is the degree to which a system will be affected by, or respond to a given shock or threat.

Adaptive capacity (of communities, organisations, governments) is determined by the ability to adjust to disturbance. Sensitivity and adaptive capacities are determined by the pool of assets and resources that can be mobilised in the face of different shocks and stresses.

The resilience of a system, then, reflects its sensitivity and adaptive capacity. People and systems are vulnerable when they are susceptible to, or unable to cope with, the adverse events.

³ This focus on exposure, sensitivity and adaptive capacity builds on the IPCC definition of vulnerability (2001) IPCC Third Assessment Report. Climate Change 2001. Working Group II: Impacts, Adaptation and Vulnerability.

Until now, there have tended to be two very different frameworks, and different sets of institutions, used to think about the nature and origins of 'natural' disasters and those relating to conflict. The concept of resilience has been an important innovation which offers the opportunity to bring together analysis of different risks in order to inform a more integrated set of responses. It does so in three main ways.

First, the approach provides for better linkage between efforts by humanitarian and developmental actors to reduce vulnerability to physical hazards. Until now 'disaster risk reduction' has been seen as primarily the job of humanitarians. The framework of resilience can make much clearer how development can contribute to risk reduction. The importance of developing such a framework, and of increasing attention and investment in this area, has been heightened in the context of climate change.

Second, it could provide a better way of understanding the full range of risks facing communities, including political shocks and stresses, alongside physical hazards. Such an integrated analysis of risk and resilience is of particular importance to inform our work in fragile and conflict-affected situations (FCAS). The HERR emphasised the importance of better linking relief and development in these contexts.

Finally, the concept of resilience is helpful in that it reinforces the importance of adopting an integrated and multi-disciplinary approach to innovation and evidence. At present, there is a significant imbalance in the quality and quantity of evidence relating to different dimensions of resilience. There has been considerable investment in improving understanding of physical hazards. But hazard is only one part of the risk equation. Much less developed is understanding of exposure and of vulnerability in order to build integrated models of risk⁴. In developing a strategy to support innovation and evidence in this area, it will be important to create the incentives for a genuinely multi-disciplinary approach. This strategy is designed to support a new generation of research and evidence to support DFID and others to the concept of resilience into programming practice.

2.2.2. Promoting innovation and evidence-based practice: bringing together DFID's multiple capabilities

DFID is well positioned to support innovation and promote more evidence-based responses to improve response and increase resilience.

It has significant **operational presence** – both humanitarian and developmental – in some of the poorest and most vulnerable developing countries. In addition to being able to use its programme funds to test new approaches, this presence also acts as a gateway to governments and civil society actors⁵.

DFID also has significant **policy influence** on the global stage on these issues. In addition to its role as an advocate for resilience and humanitarian reform, it plays an important role in the financing and governance of the multilateral system. For example, DFID has strong

⁴ See: International Council for Science, Integrated Research for Disaster Risk (2008) Science Plan <http://www.irdinternational.org/wp-content/uploads/2011/06/IRD%20Science%20Plan.pdf>

⁵ DFID is piloting its approach to resilience in its bilateral programmes in Ethiopia, Kenya, Malawi, Mozambique, Bangladesh and Nepal. It is also working at regional level in the Caribbean and the Sahel. There is further work to work with partners in support of resilience in support initiatives Pakistan, Niger, Chad, South Sudan, Burma and Zimbabwe

partnerships with the humanitarian clusters and their host agencies, as well as with the World Bank and its important work on disaster risk reduction.

Finally, it also has a strong track record in the **commissioning and management** of policy-relevant research, and in promoting evidence-based approaches to development. DFID has increased its investment in research and in efforts to ensure that decision-makers are better able to access high quality evidence.

More recently, DFID's Development Policy Committee considered a paper to promote **innovation** in the organisation⁶. The proposed approach underlines the importance of matching innovation with evidence, so that we know which innovations lead to sustained improvements in outcomes. It also emphasises the importance of matching innovation in products and processes with the nurturing of culture and capabilities to sustain innovation from testing through to diffusion.

To date, DFID's investment in research relating to disaster risk and humanitarian action has been relatively modest and dispersed across the organisation. The development of this strategy is an opportunity to increase both the scale of investment and coherence of approach.

This strategy aims to identify ways in which DFID can combine these different capabilities in relation to operations, policy, research and innovation. While additional investment in innovation and evidence is proposed, the strategy has not been developed to simply support a stand alone programme of research. Crucially it intends to provide an umbrella around which different parts of the Department, each focused on research, policy and operations, can coordinate efforts to support and develop innovation and promote evidence-based practice in this area.

2.3. Challenges: Ethics and Methodology

The ethical and practical challenges of building evidence and fostering innovation are not insignificant. An important part of this strategy will involve promoting learning within DFID and more broadly as to how best to manage and overcome these challenges.

Many practitioners consider research in disaster settings to be unethical⁷. In addition to being perceived as taking away resources from humanitarian aid, there are concerns that research can be an imposition on those already suffering, and that it does not immediately help those being studied.

The counter view is that it is equally unethical to deliver interventions that are, at best not proven, are ineffective or, worse still, do actual harm. In common with all research that involves human subjects, humanitarian research requires an ethical framework that has the well-being of those being studied at its centre, and that does not do harm⁸.

⁶ DFID (2011) 'Emerging Policy Paper on Innovation' paper to the development Policy Committee 2 November

⁷ Bolton P 'Ethical arguments for conducting research in disasters', Presentation to the Frontiers Meeting. Wellcome Trust, 29-30 June 2010.

⁸ It can do this in two ways: by identifying important unknowns that affect the nature of humanitarian action and help track the benefits/risks of interventions to help inform future programmes. DFID has developed a set of ten Principles for Evaluation and Research to ensure that the work we commission is undertaken to appropriate standards. This could be extended to include the ethics of conducting research in disaster settings.

Evidence can also play a critical role in enabling principled humanitarian action. To be able to act in an impartial and neutral manner requires an understanding of both need and the political landscape in order to be able to allocate resources and mitigate the risks of aid misuse⁹.

There are also important practical and methodological challenges facing those seeking to increase the quality and quantity of research in this area. The rarity and unpredictability of extreme hazards, as well as the unique contextual factors that influence their impact, can make it difficult to establish research programmes in the immediate aftermath of crises and to generate findings that can be of general use in the future. The ability to undertake research in the immediate aftermath of disasters can be constrained by the time it takes for funding to be made available and the logistical arrangements in place.

Poor security conditions can make undertaking research in these environments dangerous and expensive, and limit the ability to monitor change over time. Baseline data is often lacking, as are standardised approaches to the collection, analysis and archiving of key data, for example, relating to disaster losses. Disaster and conflict-affected communities are highly mobile. It can therefore be difficult to establish accurate estimates of the size of affected populations. Without an accurate denominator, it is difficult to establish reliable and statistically valid samples.

Research teams and organisations around the world are working to find solutions to these and other obstacles. Using new technologies, sampling techniques and research commissioning procedures, a new generation of evidence is being created. We will aim to capture and build upon these lessons in our work.

⁹ See, for example Darcy J and C Hoffman (2003) 'Needs assessment and Decision-making in the Humanitarian Sector', HPG Report 15, Humanitarian Policy Group, Overseas Development Institute, London.

3. Four big problems... and some unknown unknowns

3.1 Building a research framework on resilience and humanitarian response

Responding to the changed environment and building resilience will necessitate finding new ways of working. Experience in other sectors suggests that investments in research and innovation are most effective where an effort is made to develop a clear framework to guide the work. For example, the World Health Organisation regularly convenes expert groups to set research priorities around particular health issues. Similarly, UK Research Councils use scientific boards to prioritise research investments, based on rigorous reviews of existing evidence, and an analysis of research gaps.

These exercises are important. They are the equivalent of the picture on the box of the jigsaw puzzle. They enable researchers and investors in research to see which pieces of the evidence puzzle are in place and which are yet to be found or put in position. By focusing energy around a clearly defined agenda, the intent is to increase the efficiency of research spending. Metaphorically speaking, one is not wasting time looking for a piece that is already in place, but rather trying to find the one that is missing.

The architecture for prioritising research investment in the area of disaster risk and humanitarian action is at a nascent stage.

In relation to disasters associated with physical hazards, the scientific board of International Strategy for Disaster Reduction (ISDR) is one entity that aims to articulate a clear research agenda. The International Science Union's sub-committee on Integrated Research for Disaster Risk (IRDR) is another. The World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR) offers a further important centre of excellence to consider priorities for research investment, while the Intergovernmental Panel on Climate Change (IPCC)'s Special Report on Extreme Events¹⁰ provides a further mechanism to identify research gaps to address vulnerabilities and strengthen resilience. Within the UK, the forthcoming Foresight study on anticipation of extreme physical hazards will provide an important assessment of the state of the art of knowledge in relation to physical hazards¹¹.

In relation to humanitarian response there is, at present, no obvious place to set an agenda for evidence and innovation. To date, the clusters have lacked the capacity to lead research and innovation.

In implementing this strategy, it will be important to support the development of mechanisms to further refine the research and evidence agenda, encourage further

¹⁰ Inter-governmental Panel on Climate Change (2011) Managing the risks of extreme events and disasters in order to advance climate change adaptation, A Special Report of Working Group I and Working Group II. Summary for Policymakers. http://ipcc-wg2.gov/SREX/images/uploads/SREX-SPM_Approved-HiRes_opt.pdf

¹¹ Some UK Research Councils, are undertaking scoping in relation to particular sub-sectors. For example, the Natural Environment Research Council, (NERC) undertakes detailed scoping in relation to the science of predicting major physical hazards.

improvement in its quality, and encourage engagement of a broad funding base and set of supportive partners.

In the absence of international or UK exercises to prioritise DFID's investment in this area, we have used a number of mechanisms to draw the picture on the box, as it were. Specifically, we have:

- Built upon the analysis and recommendations of the HERR itself;
- Consulted with a range of experts and potential users of research, including peer review;
- Identified areas where DFID has a particular comparative advantage – as an operational donor, policy actor and/or investor in research and innovation; and
- Sought to make an assessment of where there is scope for genuine transformation within a 2-5 year period.

3.2 Four big problems: an overview

Based on the consultation and the criteria above, we have identified four big problems to which we aim to bring new evidence and ideas.

One: Decision-makers do not have routine access to good information about risk.

Such information is a pre-requisite if we are to mobilize political attention and resources in support of building resilience and know where investments in disaster risk management should be targeted. It is important that different groups can access this information so that they can hold those responsible for managing risk to account.

Two: We don't really know which existing interventions are most effective in reducing risk and vulnerability, saving lives and rebuilding livelihoods after crises.

We need to find new ways of doing business that are more effective and affordable, and that enable us to respond to the new challenges, such as urbanisation and climate change.

Three: We don't have sufficient capacity to build resilience or mount responses when disaster strikes. National governments and institutions need to have the capacity to lead efforts to build resilience and respond when crises strike. How can we support their best efforts? Equally, how do we ensure that the international system can provide support when national capacities are genuinely overwhelmed, and that those affected by conflict can access an independent lifeline when all others fail them?

Four: Decision-makers are not always using available evidence to inform their decisions. Either because they can't find it or they don't have the incentives to apply it.

We map out in more detail why these problems are important and how we propose to tackle them below. But in tackling these questions we are aiming to produce the following types of result:

- **Better evidence of need:** For example, we want to make sure that we have age and sex disaggregated data to guide our interventions. We also want to be able to

assess important trends such as the implications of more disasters in urban environments.

- **Better evidence of what works:** We will generate new data about which interventions are most likely to work in different contexts, and of the relative costs and benefits of different approaches.
- **New products and processes tested, and in some cases ready to go to scale:** We will invest in innovation – supporting the development of new products and processes, and testing existing innovations so that we can work out which ones can work at scale.
- **Better use of existing evidence:** We will invest in initiatives that help decision-makers access the information they need when they need it. We need to make sure that research and evidence has an impact on the ground.

3.3. Problem 1: Enabling decision-makers to access and use evidence about risk

3.3.1. What is the problem

Economic losses from weather and climate-related disasters have increased, but with large spatial and inter-annual variability. While economic disaster losses tend to be higher in developed countries, fatality rates and economic losses expressed as a proportion of GDP are higher in developing countries. For example, during the period from 1970 to 2008, over 95% of deaths from natural disasters were in developing countries.¹²

The latest evidence compiled by the IPCC¹³ suggests that climate change will result in more frequent, severe and unpredictable weather-related hazards such as droughts, tropical cyclones, floods and heat waves. However, it is also important to note that the IPCC indicates that the main drivers for future increases in losses due to climate extremes are likely to be socio-economic in nature – mainly the result of trends in exposure and vulnerability.

Vulnerability is often closely correlated with poverty. Individuals and communities experience different levels of exposure and vulnerability according to their levels of wealth and education, disability and health status, as well as their gender, age, class, and other social and cultural characteristics.

While many countries have made significant efforts to improve their disaster management capacities, they have generally not been successful in factoring disaster risk reduction into development planning. Disaster risk¹⁴ is generally poorly understood and therefore not appropriately considered by most stakeholders, including government agencies¹⁵. Tools

¹² IPCC SREX: Special Report of Working Group I and Working Group II 2011. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation.

¹³ See footnote 12

¹⁴ Disaster Risk as defined by the IPCC is the likelihood over a specified time period of severe alterations in the normal functioning of a community or a society due to hazardous physical events interacting with vulnerable social conditions, leading to widespread adverse human, material, economic, or environmental effects that require immediate emergency response to satisfy critical human needs and that may require external support for recovery.

¹⁵ See, for example, UN/ISDR (2011) Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters. Mid Term Review 2010-2011. P60.

that help decision makers to assess options, costs and trade-offs are also limited. Relatively there is more research on geophysical hazards, The Government's Foresight Programme is currently undertaking a major review of knowledge in this area, and the UK Research Councils are investing significantly in this area.¹⁶ More is known about some hazards than others. For example, more is known about the impact of volcanoes or tsunamis, than drought. The same applies to key aspects of exposure and vulnerability. For example, little is known about who is vulnerable and how, and how in some cases girls and women may be more vulnerable than boys and men¹⁷. Data regarding disaster losses and a clear understanding of the implications of urbanisation, and of risks in urban environments, is lacking. Yet such data is critical for decision makers who need to be able to identify which interventions will be most effective and which investments will yield the highest rates of return.

It is equally important to be able to integrate improved knowledge and forecasting into effective disaster risk preparation and management, decision-making, strategies and actions. To achieve this it will be necessary to improve communication of risk assessments and develop tools and methodologies that help decision-makers and communities to make informed decisions. It will also be critical to better understand how decision-makers currently make use of the information that they do have access to.

A corollary to developing better models of risk is ensuring that there is a shared understanding as to how to apply the concept of resilience. A better understanding is needed within the development community as to how resilience relates to other core development concepts such as poverty, vulnerability and sustainability. As it is important to build up models of risk that can factor in social and political vulnerability, so it will be important to further test how the concept of resilience can be applied in fragile and conflict-affected states. The prize here would be to provide a better bridge between humanitarian action and state-building and peace-building approaches in these contexts, which was an important recommendation of the HERR.

3.3.2. What will we do and what do we hope to achieve?

We will do four main things.

- i. We will work with others, including in the insurance industry, to enable decision-makers in developing countries to access existing evidence about risk, and to better understand whether and how decision-makers use this information to inform action.
- ii. We will invest in initiatives that help improve the quality and depth of risk analysis. In particular, we will support initiatives that enable a more integrated analysis of risk – combining analysis of different hazards, risk, vulnerability and exposure.
- iii. We will invest in initiatives that help understand how best to apply the concept of resilience in fragile and conflict-affected situations in order to help join up the humanitarian, risk reduction and other development investments and initiatives in these environments.

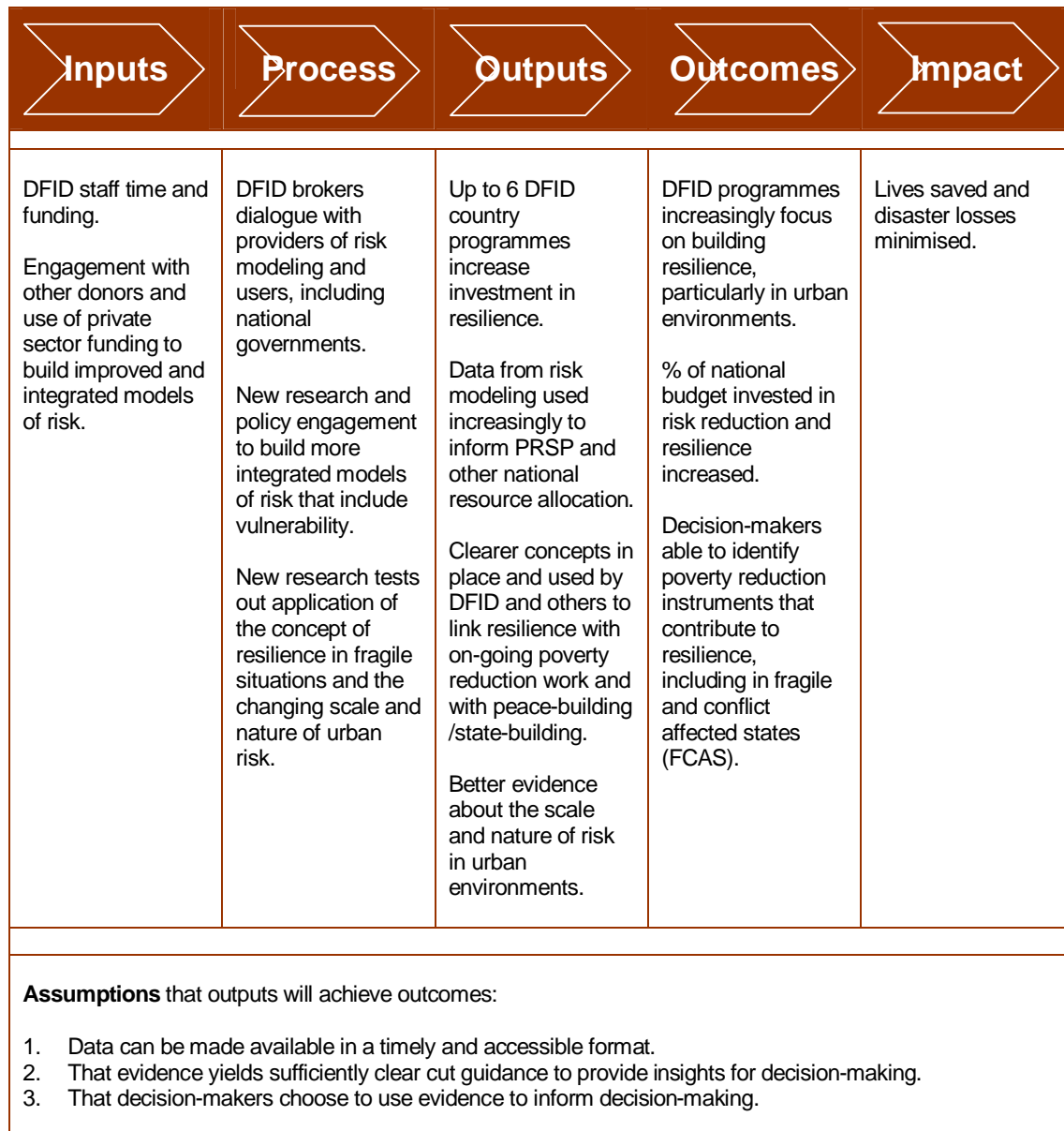
¹⁶ For example with the Met Office Hadley Centre.

¹⁷ 'The tsunami's impact on women', Oxfam Briefing Note. March 2005

- iv. We will invest in initiatives that improve understanding of risk in urban environments.

The theory of change for these investments is provided below (Figure 2).

Figure 2: Theory of Change: Risk modeling



3.4. Problem 2: Building resilience and improving response: Finding out what works and investing in new solutions

3.4.1. What is the problem?

If decision-makers begin to take risk more seriously, then they will also need to know how to:

- Reduce exposure and vulnerability to hazards by understanding which risk reduction mechanisms work in which contexts?
- Improve the effectiveness of responses to crises; and
- Ensure that investments in recovery help communities to build back better, leaving them more able to cope with future shocks.

We still lack knowledge as to how to improve some of the most basic elements of disaster response. There is simply not enough data to know what works best across the different stages of the risk management cycle. And the rate of innovation and new thinking is not keeping up with the increased rate of risk.

Humanitarian crises typically require exceptional 'one-off' support, combined with urgent action to save lives and ensure access to health services, water and sanitation, nutrition, shelter and protection. But there is a clear demand for new ways to tackle old humanitarian challenges - and a need for innovative technologies and approaches to provide a more effective response. The private sector has a key role to play in developing and supplying appropriate technologies for use in emergency situations such as the use of mobile phone technology to inform needs assessments and track migration patterns and the use of smart cards to deliver cash support direct to people in urgent need following a disaster. For example, within weeks of the 2010 Pakistan floods 250,000 households were receiving cash payments through a pre-paid smartcard.

There are many challenges to providing public health interventions following a disaster that change as the response develops. In sudden onset crises the initial health challenges are generally dominated by blunt trauma and breakdown of physical infrastructure. Post immediate disaster issues include increases in infection, and the risks associated with lack of shelter and limited access to clean water and sanitation.

Diarrheal diseases including dysentery and cholera remain major challenges in the context of sudden and slow onset crises - both 'natural' and those relating to conflict - accounting for more than 40% of deaths in the acute phase of an emergency, with over 80% of deaths in children under 2 years of age¹⁸. Girls and women are particularly affected by lack of well-designed latrines: often a temporary communal latrine, soon overwhelmed by the numbers of users, with pits overflowing and rapidly becoming a hazard¹⁹. This underscores the importance of investment in improving water and sanitation.

Further work is required to better manage human waste in urban and difficult settings. Problems with safe excreta disposal were particularly evident in Haiti (Johannessen

¹⁸ Connolly M, Gayer M, M Ryan, P Salama, P Speigel and D Heymann (2004) 'Communicable diseases in complex emergencies: impact and challenges'. *Lancet*, 364: 1974-83.

¹⁹ Joerg Haucke and Gert Kreutzer (2010) Emergency Sanitation. *Water Practice & Technology* .094

2011)²⁰. The inability to dig pit latrines - due to a high water table, concrete sites, or lack of permission - slowed the aid effort considerably. Agencies took weeks to construct wooden raised latrines with small holding tanks. The use of 'porta-loos' as a temporary measure in these contexts proved inadequate due to high cost and small storage capacity. The 'Interagency Plastic Slab' and 'Oxfam Bucket' are steps in the right direction. Much more work is required in order to build a consensus of what works and what doesn't, to establish competitive supply chains, and agree standards and approaches.

Equally, in some areas, we simply don't have the right tools or knowledge. For example, in relation to nutrition there are well tested interventions available to treat severe malnutrition. Much less work has been done however on how to prevent moderate malnutrition from developing into severe malnutrition and into a crisis.

The HERR underscored the importance of finding innovative new ways of doing business if we are to cope with an increase in the number and severity of extreme events in a resource constrained world. We know that, while risky, investment in innovative products and processes can yield very significant results. For example, Box 1 provides a summary of how DFID's support for Community Therapeutic Care contributed to the development of a new treatment for malnutrition that is both more effective and much cheaper than traditional treatment of patients in a clinic – allowing more people to be treated for the same amount of money with better outcomes.

²⁰ Johannessen A (2011) 'Identifying gaps in emergency sanitation: design of new kits to increase effectiveness in emergencies'. Oxfam and WASTE. 22-23 February 2011, Stoutenburg Netherlands.

Box 1: **Community Therapeutic Care (CTC)** **A pivotal innovation**

Treating malnutrition at home

Until the 1990s, the conventional treatment for severe acute malnutrition was to bring affected people into a clinic and provide therapeutic feeding under medical supervision. Valid International developed Community-based Therapeutic Care (CTC) as a way of treating more people in resource scarce environments. This approach enables malnourished people and their carers to treat themselves at home using Ready to Use Therapeutic Foods (RUTFs), such as 'plumpy nut'.



Bringing the treatment to the patient not only reduces the risk of infection but allows patients and their carers to remain at home, reducing the costs of being in a clinic. So, for example, carers can look after other children, attend to other household requirements and maintain their livelihoods.

What did DFID invest?

DFID contributed just under half of the £3.5 million budget to develop this approach.

What were the results?

CTC achieves higher recovery rates and lower case fatality rates than conventional treatments.

CTC can be as much as 90% cheaper than conventional treatments.

CTC can reach more people than conventional treatments.

In Malawi, Ethiopia and Sudan (2001 to 2005) CTC reached 72.5% of the population in need, compared to less than 10% for clinic based treatment programmes.

By mid 2010, 55 countries were using this approach and in the past 5 years 49 new countries have started implementing CTC. During 2009 alone, over 1 million children were admitted for Severe Acute Malnutrition treatment worldwide.

Sources: Collins and Sadler 2002, Collins and Sadler 2004, Collins, Dent, Binns, Bahwere, Sadler and Hallam 2006, Emergency Nutrition Network report 2006; Puett, 2011

There are two areas where we think there is particular scope to invest in further testing of promising innovations; risk-sharing and cash. The past decade has seen a quiet revolution taking place in terms of the use of social protection as a means of enabling poor people to find a route out of poverty²¹. At the same time, cash is being used increasingly to complement in-kind assistance, particularly food aid, shelter and support to livelihood recovery²².

There is significant and growing evidence of success in emergency cash transfer responses at project level. However, there is less knowledge and experience of delivering cash at a large scale in an emergency response and especially in the first week of a quick onset emergency. Lacking also are documented experiences of using social protection schemes that can support populations over time – enabling them to cope better with ongoing chronic poverty and with acute shocks. In other words, approaches that link long-term developmental approaches with humanitarian ones.

²¹ Barrientos A and D Hulme (2008) 'A quiet revolution for the poor and the poorest in developing countries: reflections on a quiet revolution', Brookes World Poverty Institute, University of Manchester, BWMP Working Paper 30.

²² See Harvey P and S Bailey (2011)

There are important potential constraints to further scaling up the use of cash. Weak institutions and architecture for cash delivery, particularly in Africa, are key challenges. At the level of policy there is a major opportunity to transform the humanitarian architecture to be more inclusive of cash transfers as an equal option to in-kind assistance such as shelter, food transfers and seeds and tools.

There are other opportunities to test new approaches to risk sharing, including the use of country-based and micro-insurance. DFID is developing several major programmes in this area (see example in box 2 below) and there is an opportunity to work with others to document the scope and limitations of these approaches.

Box 2: Testing out approaches to risk financing

Insuring against disaster: Caribbean Catastrophic Risk Insurance Facility (CCRIF)

The CCRIF was designed to enable Caribbean Governments to jumpstart recovery efforts with an immediate infusion of cash in the aftermath of a disaster.

Why is it innovative?

The CCRIF is the world's first regional fund to use parametric insurance to give governments access to low price earthquake and hurricane catastrophe coverage. With standard insurance approaches, detailed assessments of losses have to be carried out before a payment is made. With parametric insurance, loss is calculated by using an index in which hazard levels - wind, storm surge and waves for hurricane, ground shaking for earthquake - are used as an advance proxy for losses. This means that payments to be triggered very quickly, helping governments to address the problem of short-term liquidity to mount response and effect early recovery.



What was DFID's contribution?

The initial investment in the CCRIF was developed through funding from the Japanese Government. The UK contributed £7.5 million to the fund along with a number of other donors and governments from the region itself. By the end of 2010/2011 financial year, donor contributions had increased to \$67.5 million.

Results

- Since 2007, the CCRIF has made 8 payments totaling \$32,179,470 to the governments of participating states. All payments were made within a month, some within a matter of weeks.
- 14 days after being struck by a devastating earthquake of magnitude 7.0 on 12 January 2010, Haiti received a payment of \$7.75 million (approximately 20 times their premium for earthquake coverage of \$385,500).
- This initiative has also secured more indirect benefits. Through effective project delivery, professionalism, data collection and regional collaboration DFID Caribbean reports that CCRIF is making a significant contribution to boosting regional competencies for Disaster Risk Reduction and climate change.
- In 2010-2011, all 16 member countries renewed their insurance coverage. DFID is currently supporting the development of a monitoring and evaluation framework for the CCRIF – helping to build the evidence base regarding the use of parametric insurance to better manage risk.

3.4.2. What will we do and what do we hope to achieve?

We will focus on doing three things:

- i. **Identifying and testing innovative ways of managing risk.**
- ii. **Research which existing interventions are most effective in the management of risk and in responding to crises.** We will focus on strengthening the evidence base relating to the use of cash, particularly at scale and as a first line response (see box 3). We will also invest in testing out the effectiveness of different approaches to disaster risk reduction, response to acute crises and to recovery. We will take a multi-sector approach, including efforts to improve knowledge in relation to public health (including nutrition and water and sanitation); protection of civilians; and other core areas of resilience and response.
- iii. **Invest in catalyzing and testing innovative approaches to building resilience and improving response to crises.**

Box 3: Building an integrated evidence base on cash

Working with ECHO, UN agencies, NGOs, academic institutions and the private sector, it is proposed to develop a comprehensive and accessible evidence base to test the scope and limitations of scaling up the use of cash in emergencies.

Specifically we will:

- Use existing evidence to develop a decision-making tool to guide resource allocation within DFID, and improve UK and international systems to track the use of cash-based response in emergencies;
- Implement / undertake / design an operational research/evaluation programme to test the scope for using cash-based responses as a first line response;
- Evaluate the impact of cash on health, shelter and economic recovery;
- Commission research and evaluation studies to identify ways to better link short and long term cash-based mechanisms in disaster prone countries;
- Implement / undertake / design a programme of research that identifies and tests different technologies in the delivery of cash-based approaches; and
- Commission a study to consider the institutional dimensions of increasing the use of cash based responses.

Figure 3: Theory of Change: What works

Inputs	Process	Outputs	Outcomes	Impact
<p>DFID staff time and funding.</p> <p>Engagement with donors and other actors to increase investment and coordination around the evidence base relating to Disaster Risk Reduction (DRR) and humanitarian response.</p>	<p>Invest in research and evaluation to find new ways of reducing and managing risk, and to test them.</p> <p>New research investment to test the effectiveness of different humanitarian interventions on reaching the most vulnerable – including public health, protection and DRR.</p> <p>New investments to promote innovation in humanitarian response and risk reduction</p>	<p>Strong evidence available regarding the scope and limitations of country-based and micro-insurance as part of risk management strategies, including in fragile and conflict-affected countries.</p> <p>Library of evidence built up to test the effectiveness of different interventions.</p> <p>New products and processes identified and tested.</p> <p>The scope for introducing cash is scale tested.</p>	<p>DFID and others can be more confident in their investments in risk-sharing mechanisms.</p> <p>Efficiency and effectiveness of interventions increased.</p> <p>Innovative technologies for humanitarian response developed and widely adopted.</p> <p>Decision-makers able to identify more confidently and consistently when (and when not) to use cash and risk-sharing.</p>	<p>Lives saved, disaster losses minimised and value for money increased.</p>
<p>Assumptions that outputs will achieve outcomes:</p> <ol style="list-style-type: none"> 1. Data can be made available in a timely and accessible format. 2. That evidence yields sufficiently clear-cut guidance to provide insights for decision-making. 3. That decision-makers choose to use evidence to inform decision-making. 				

3.5. Problem 3: We don't have sufficient capacity to promote resilience and ensure effective humanitarian response

3.5.1. What is the problem?

At present, we don't know the extent to which those directly affected by crises actually receive support. There is a tendency to conflate the assessed population with the population that is in need. Within any given population we often don't know who is receiving what, and how existing resources are allocated between different socio-economic and demographic groups.

The HERR made clear that the international humanitarian system is not able to meet the majority of the current demand for assistance, and that its capacity to do so is likely to become increasingly stretched.

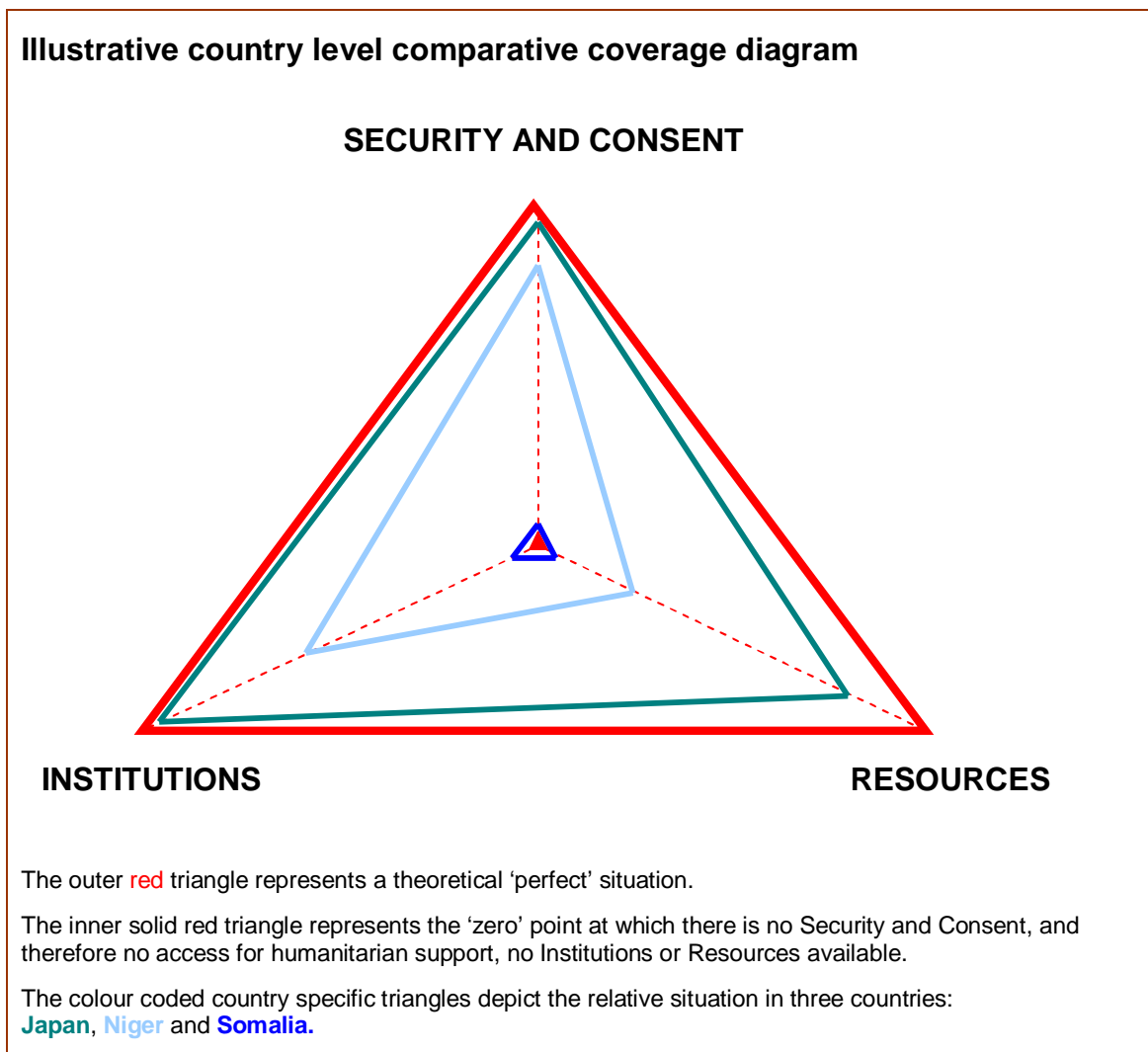
So, how can we ensure that there will be sufficient capacity both to respond to crises when they occur, and to build resilience to reduce the impact of growing risk?

The degree to which humanitarian assistance can reach those who need it is shaped by three key factors.

- **Institutions** Do local and national institutions (governmental, religious, community etc.) have the capacity to assess, organise and deliver?
- **Security and consent** Can different actors reach the affected population safely and will the controlling authorities allow them intervene?
- **Resources** Is there sufficient money available at the right time and in the right way to pay for what's required? Are the right materials available – food, tents etc.? Is there sufficient knowledge of what to do and how to do it?

Each of these is explored more fully below. Figure 4 attempts to illustrate how these factors interplay and shape humanitarian access and coverage.

Figure 4: Factors governing humanitarian coverage



Understanding the institutional framework for the management of risk and response

DARA, an independent think tank, has established an index to measure the quality of the institutional and governance framework in relation to countries' capacity to reduce risk²³. Perhaps unsurprisingly, their analysis shows that the bottom six countries (Afghanistan, Chad, Haiti, Somalia, Democratic Republic of Congo and Somalia) are low income countries that have recently experienced conflict or political crises and despite their very high level of vulnerability to a range of extreme physical events, they have very weak capacity to address the drivers of risk. Similarly UN ISDR has concluded that improving governance is the single most important priority for reducing risk²⁴. It finds little improvement in poor countries' capacity to integrate risk reduction into public investment planning since the Hyogo Framework was established.²⁵

²³ United Nations (2011) *Global Assessment Report on Disaster Risk Reduction*

²⁴ See United Nations (2011) *Global Assessment Report on Disaster Risk Reduction* page 85

²⁵ Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters, ISDR

In terms of humanitarian response, since the 1980s, the majority of resources, research and policy dialogue has focused on understanding the *international* humanitarian system²⁶. This system has evolved considerably, with a deepening of efforts to reform and strengthen its capacity from 2004 onwards. There are now more people involved in, and more money spent on, improving the humanitarian system than ever before. Despite this, capacity remains stretched.²⁷

An increasingly important question is to understand better the ways in which international actors work with national and local institutions to support investment in risk reduction and response. In particular, what is needed is to enable national institutions to strengthen capacity to lead and manage disaster risk management (DRM), building on existing institutions where they exist. For an organisation like DFID for example, there are important questions regarding whether and how budget support could be targeted better to support investments in these areas. What are the best ways of configuring responsibility for DRM within governments? What are the best ways of supporting good governance of risk, and for incentivizing accountability and transparency in the management of disaster risk?

An obvious example of the importance of building institutions comes from the health sector. While there are specific and immediate threats to public health immediately during and after a disaster, more people die as a result of the public health system breaking down following the onset of a disaster than as a result of the disaster itself. A key evidence gap is the extent to which it is possible to build up the resilience and preparedness of public health systems and other public institutions critical to risk management, such as water and sanitation.

ECOSOC resolution 2011/8 clearly points to the determination on the part of developing countries to reduce dependence on international actors in this area. To date, relatively little work has been undertaken to understand the implications of the 're-nationalisation' of disaster response²⁸. While largely welcomed, there is concern on the part of some international humanitarian organisations that, particularly in the most fragile and contested environments, this reassertion of sovereignty may come at the expense of humanitarian space.

But it is not only a more effective response from governments that is required if we are to increase the reach of humanitarian and resilience work. There are an estimated 2,600 international organisations working in the humanitarian sector. If local and national institutions are included this figure rises to 25,000²⁹. Evaluations of disaster responses consistently find that it is these local and national organisations that are particularly critical to survival in the immediate aftermath of disasters³⁰. Clearly a key question is how is the institutional framework for disaster risk management and humanitarian response changing? What are the implications for the capacity to promote resilience and save lives, and for ensuring an accountable response?

²⁶ See, for example Borton J (1993) 'Recent Trends in the International Relief System' *Disasters* 17(3): 187-201 for an account of how the volume of relief aid channelled through national governments shifted markedly. For example, in 1976 the European Commission channelled over 90% of its relief budget through national governments in affected by countries. By the early 1990s this had fallen to less than 6%.

²⁷ See Harvey 2010; Calrke, P. and Ramalingham, B. 2008.

²⁸ An important exception is the work of Harvey P (2009) 'Towards Good Humanitarian Government', HPG Report 29, Overseas Development Institute, London

²⁹ Walker, P. and C. Russ (2010). Professionalising the Humanitarian Sector: A Scoping Study. Report commissioned by ELRHA, April 2010.

³⁰ See for example, Tsunami Evaluation Coalition (2007) Synthesis report: expanded summary. Joint Evaluation of the international response to the Indian Ocean Tsunami http://www.alnap.org/pool/files/Syn_Report_Sum.pdf

Security and consent

International Humanitarian Law (IHL) underscores the responsibility of national governments and warring parties to allow access to conflict affected communities. UN Resolution 42/186, which acts as the foundation for international response to crises, underscores the primacy of sovereignty in shaping humanitarian response.³¹ Without the consent of the internationally recognised government, humanitarian action can't get off first base.

Populations living in highly insecure environments are at particularly high risk of death³². This is not due primarily to direct deaths as a result of acts of violence, but rather reflects the indirect impacts of conflict on health and well-being because of lack of access to health care and higher risk behaviour (for example flight to the bush where the risks of contracting malaria are higher)³³. Girls and women in particular are at risk, and vulnerable to sexual violence. It is, then, particularly important to reach those living in the most insecure environments.

However, there is a perception that access to these communities is becoming more difficult. Jan Egeland has created a partial inventory of suspended or cancelled programming and has concluded that the humanitarian footprint is shrinking in a small number of countries that are perceived to be the most dangerous³⁴.

In addition, there is a perception that the nature of conflict and violence is changing, and that it is becoming more difficult for international agencies to negotiate access with warring parties and armed actors. There are important questions as to the extent to which humanitarian principles continue to enable humanitarian actors to operate in the most violent environments. We don't know fully what are the characteristics that enable some agencies to open up more humanitarian space, nor what are the factors that shape acceptance by warring parties.

Where access is reducing for international actors, there is an increased reliance on 'remote management', which means working through local intermediaries to deliver assistance. During the famine in south central Somalia in 2011, for example, this was the primary means through which aid has been delivered. There is relatively little formal research and evaluation of the relative effectiveness of different approaches. Although there is some growing interest in how technologies, such as mobile phones, can be used to monitor delivery, and contribute to accountability.³⁵

³¹ See Annex Paragraph 3: The sovereignty, territorial integrity and national unity of States must be fully respected in accordance with the Charter of the United Nations. In this context, humanitarian assistance should be provided with the consent of the affected country and in principle on the basis of an appeal by the affected country.

³² See, for example, de Waal A (1990) "A reassessment of entitlement theory in the light of recent famines in Africa", *Development and Change* 21(3): 469-490; . See also Macrae J and A Zwi (1992) 'Food as an instrument of war: a review of the evidence. *Disasters* a review of the literature", *Disasters* 16(4): 299-321. By definition data in these environments remain extremely difficult and are often disputed. See for example, Health and Nutrition Tracking Service (2009) Peer Review Report: Re-examining mortality from the conflict in the Democratic Republic of Congo 1998-2006 for an analysis of the difficulties of collecting robust epidemiological data in such contexts.

³³ See, for example Zwi A and A Ugalde (1989) 'towards and epidemiology of political violence in the Third World', *Social Science and Medicine* 28(7): 633-42

³⁴ OCHA, 2011, *Stay and Deliver – good practice for humanitarians in complex security environments*: Jan Egeland,

³⁵ See, for example and A Stoddard , Harmer A and V DiDomenico (2006) *Providing Aid in Insecure Environments. HPG Report 23*, Overseas Development Institute, London. See also for example, Humanitarian Innovation Fund for an example of the use of SMS to support remote management <http://www.humanitarianinnovation.org/projects/large-grants/drc-somalia>

A key question, then is how to increase access for humanitarian work in insecure environments. This work is likely to be of equal interest to other developmental actors working in fragile situations.

Resourcing

There is a relatively large volume of work in relation to the financing of international humanitarian response³⁶. A major concern of this work has been to ascertain the degree to which the volume of resources and methods for resource allocation underpin impartial response. There has also been growing interest in the emergence of non-traditional donors through existing international channels and more broadly.³⁷

The Global Assessment Report (2011) notes the continued difficulty of mobilizing national investment in risk reduction mechanisms. The report argues that this is due to lack of prioritization of such investments in national budgets. The political incentives are higher for politicians and decision-makers to invest in responding to crises than to reducing the impact of events with uncertain probability and impact. As argued in section 3.5.1 above, the importance of providing decision-makers with better information about risk and the economic returns to investment is at least part of the picture.

It will be important to develop a greater understanding of how different financing instruments – developmental, humanitarian and climate adaptation financing – are being combined and used to reduce risk and enhance the quality of response.

Knowledge is also a key resource. This is the focus of section 3.6.

3.5.2. What will we do and what do we hope to achieve?

We will focus on doing three things:

- i. **Invest in new research on the institutional and governance dimensions of disaster risk reduction and humanitarian response.** Specifically we will aim to identify different ways in which different organisational structures and financing arrangements best enable governments to increase their capacity to invest in resilience and respond to crises. This evidence could be used to design budget support programmes, multilateral investments in national capacity for DRR and response, and to identify better ways to enable citizens to lead and manage risk reduction;
- ii. **Invest in new research on how to reach populations in insecure environments.** Specifically, we will aim to identify the best ways of reaching populations living in insecure environments in terms of impact and reduction in leakage; and
- iii. **Consider undertaking research in relation the implications of new climate financing for investment in resilience and response.**

³⁶ See, for example, Global Humanitarian Assistance <http://www.globalhumanitarianassistance.org/>; Humanitarian Policy Group's work on financing reform etc.

³⁷ A Stoddard, Harmer A and V DiDomenico (2006) Providing Aid in Insecure Environments

Figure 5: Theory of Change: Increasing the capacity to deliver on resilience and improved response

Inputs	Process	Outputs	Outcomes	Impact
<p>DFID staff time and funding.</p> <p>Engagement with country partners (governmental and civil society) and the private sector.</p>	<p>Invest in research and evaluation to better understand the organisation and governance of risk in low income developing countries.</p> <p>New research investment to test the effectiveness of different approaches to remote management.</p> <p>Potentially, new investment in better understanding the financing of resilience.</p>	<p>Improved evidence available regarding the best ways to develop national capacity to build resilience and respond to crises including in fragile and conflict-affected countries.</p> <p>Library of evidence built up regarding the effectiveness of different approaches to remote management.</p> <p>Better understanding of the different contribution of different financing instruments to building resilience.</p>	<p>DFID and donors better able to design programmes to support governments and civil society to manage risk and respond to crises.</p> <p>Humanitarian assistance reaches those living in the most insecure environments; leakage reduced.</p> <p>Different funding streams used more efficiently and effectively to support investments in resilience</p>	<p>Lives saved, disaster losses minimised and value for money increased.</p>
<p>Assumptions that outputs will achieve outcomes:</p> <ol style="list-style-type: none"> 1. Data can be made available in a timely and accessible format. 2. That evidence yields sufficiently clear cut guidance to provide insights for decision-making. 3. That decision-makers choose to use evidence to inform decision-making. 				

3.6 Problem 4: Decision makers lack the incentives to use evidence in their work, and/or find it difficult to access

3.6.1. What is the problem?

This strategy is underpinned by the assumption that that better evidence can help to increase the effectiveness of interventions. It can help us to identify what is needed, when and why, and what interventions are likely to work. It can help us to anticipate changes in environment and identify areas where we need to invest more and/or differently.

Good information and analysis is also important in terms of deepening accountability; good data – qualitative and quantitative – is needed to tell us whether something worked, and whether it was delivered in the most efficient way – were the right decisions and actions taken by those responsible? Were the most vulnerable effectively reached?

Many of the blockages to building a strong evidence base have already been identified, but there are also some more generic issues that relate to the way in which data are collected, analysed and used, which are the focus of this section. Also of concern here are issues relating to **how** decision-makers can access and use existing evidence to inform decision making. Finally this section tackles the question of capacity – who is collecting this data and who has the skills to analyse it.

A reliance on learning by doing

Across the cycle of disaster prevention, response and recovery there are important limitations to the existing evidence base. In the absence of a strong written evidence base, practitioners have had to rely on accepted practice of what has worked before. Such experiential learning is an important part of building good practice, but more systematic assessment and documentation of impact can help to address issues of bias and help to generate evidence that can reach beyond individual organizations.

Evaluation is a more familiar approach to building evidence of impact than formal research. However, evaluations are often designed in such ways as to focus on the delivery of outputs rather than achievement of outcomes and impacts. Donors tend to encourage evaluations to focus on the level of project or agency, rather than in relation to particular crises or areas, presenting problems of attribution and tending to encourage a large number of evaluations, often of variable quality. Those affected by disasters and crises are rarely involved in building the evidence base. Research and evaluations tend to concentrate on high profile selected crises, while others are neglected³⁸.

The problem of data: measuring need, defining outcomes, assessing cost and impacts

High quality data is fundamental to ensuring high quality responses. Decisions must be informed by data on what exactly is needed, for whom, where, when and why and what the impact of the intervention will be. We described earlier challenges that exist in conducting research and evaluation in humanitarian contexts, such as establishing baselines,

³⁸ Mazurana, D., P. Benelli, H. Gupta and P. Walker (2011). Sex & age matter: Improving Humanitarian Response in emergencies. Boston: Feinstein International Centre, Tufts University. August 2011.

following populations to assess impact, and identifying comparison groups. We need however to strengthen the quality of research and data collection on the ground to generate the required evidence, through for example, guidelines for conducting research and evaluation, and ethical practice in humanitarian contexts. In order to provide this information in an accessible and comparable form we need to agree common standards and methodologies for data collection.³⁹

A proliferation of initiatives designed to assess needs mean that better evidence is becoming available⁴⁰. This work has however been slow to yield tangible results and strongly evidenced appeals whose outcomes can be tracked against delivery remain rare.

The data that is available is not adequately disaggregated by age and sex⁴¹ and this can often mask the needs of particularly vulnerable groups. For example, in most emergencies data is not disaggregated in such a way as to identify how many older people there are. In Uganda this led to a situation that where internally displaced populations were returning to their homes, and no plans had been made for the 40% of residents who were elderly and lacked the means and physical stamina to return⁴². Equally the needs of disabled people are often overlooked.

The question of coverage is also poorly explored. Current measurement methods suffer from a range of constraints, including a general over-reporting of results achieved, which leaves significant areas of need uncovered⁴³.

Needs assessments, impact assessments and cost benefit analysis must be linked in order to identify and implement the most effective responses for reaching the most vulnerable. In a context of proliferating emergencies and resource constraints there is great need to ensure value for money. This might, for example, lead to the development of nutritional metrics for looking at impact and value for money.

Work is currently underway within DFID to develop a library of such data, including in relation to Disaster Risk Reduction. Continuation and expansion of this work will require continued investment in the primary evidence base regarding the relative effectiveness of different interventions. Greater investment in data that highlights the cost-benefit of earlier interventions will be particularly important.

It is also important that we consider what kind of evidence counts. The experiences of disaster-affected communities are a rich source of evidence both of need, and the relative effectiveness of interventions across the humanitarian cycle. Experience in collecting this sort of evidence is increasing, but there is a strong need to systematically involve beneficiaries in the collection and use of data to inform decision making. Currently the people directly affected by crises do not routinely have a voice, which makes it difficult for their needs be effectively addressed.

³⁹ See Roberts, Les, Health and Nutrition Tracking Service (HNTS) Consultancy Report, Priority indicators in complex emergencies, Sept 2009 for work commissioned by HNTS (WHO) on identifying key indicators for health in crises.

⁴⁰ Bradt, D.A. (2009) Evidence-based decision-making in humanitarian assistance, HPN Network Paper. London: Overseas Development Institute

⁴¹ Mazurana D et al (2011) Sex and Age Matter: Improving humanitarian response in emergencies, Feinstein International Center, Tufts University.

⁴² Wells J, *Protecting and assisting older people in emergencies*, London, ODI Network Paper 53, 2005

⁴³ See for instance tools developed by Valid International - the Centric Systematic Area Sampling (CSAS) technique; the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) and the Simplified LQAS Evaluation of Access and Coverage (SLEAC)

Data and evidence is not used to inform decisions

Even when good data is available, it is not always used to inform decisions. There are a number of reasons for this, including data not being available in the right format, not widely dispersed, not easily accessible by users, not being transmitted through training and poor information management. Also, data may arrive too late to be able to influence decision-making in real time operations⁴⁴, or may not be valued by actors who are more focused on immediate action. There are some important knowledge management initiatives in the humanitarian arena, but these have tended to be dogged by a lack of contributions from field staff on the one hand and a reluctance on the part of academics to report tentative findings in advance of publication in peer reviewed journals.

Aid workers under pressure have little time to reflect and analyse, limiting the collection of good data and their ability to synthesise and use it⁴⁵. This has been further hampered by limited and fragmented training, high staff turnover in the humanitarian field, where people move from one crisis to the next, and the administrative pressures of organisations limiting investment in strengthening staff capacity⁴⁶. Improvements have been made in professionalising the sector and improving training and education, but there is a need to build on this.⁴⁷ Increasingly there is a view that the primary purpose of international staff should be on supporting the development of national capacity to build resilience and respond to crises. There is a need to further enrich this capacity by investing in the training of national staff, and establishing partnerships between international and national staff for research and evaluation.

Movement toward increasing investments in capacity and enhancing the use of evidence in decision-making require shifts in the way the humanitarian sector has operated to date. This includes incentives and changes to organisational culture that promote investment in generating research and evidence, rewarding the use of evidence in planning and delivery, and promoting staff capacities. DFID hopes to develop such an approach within itself and in partnership with others.

⁴⁴ Sanidson, P. (2008). The Utilisation of Evaluations Chapter 3. ALNAP Review of Humanitarian Action

⁴⁵ Mazurana, D., P. Benelli, H. Gupta and P. Walker (2011). Sex & age matter: Improving Humanitarian Response in emergencies. Boston: Feinstein International Centre, Tufts University. August 2011.

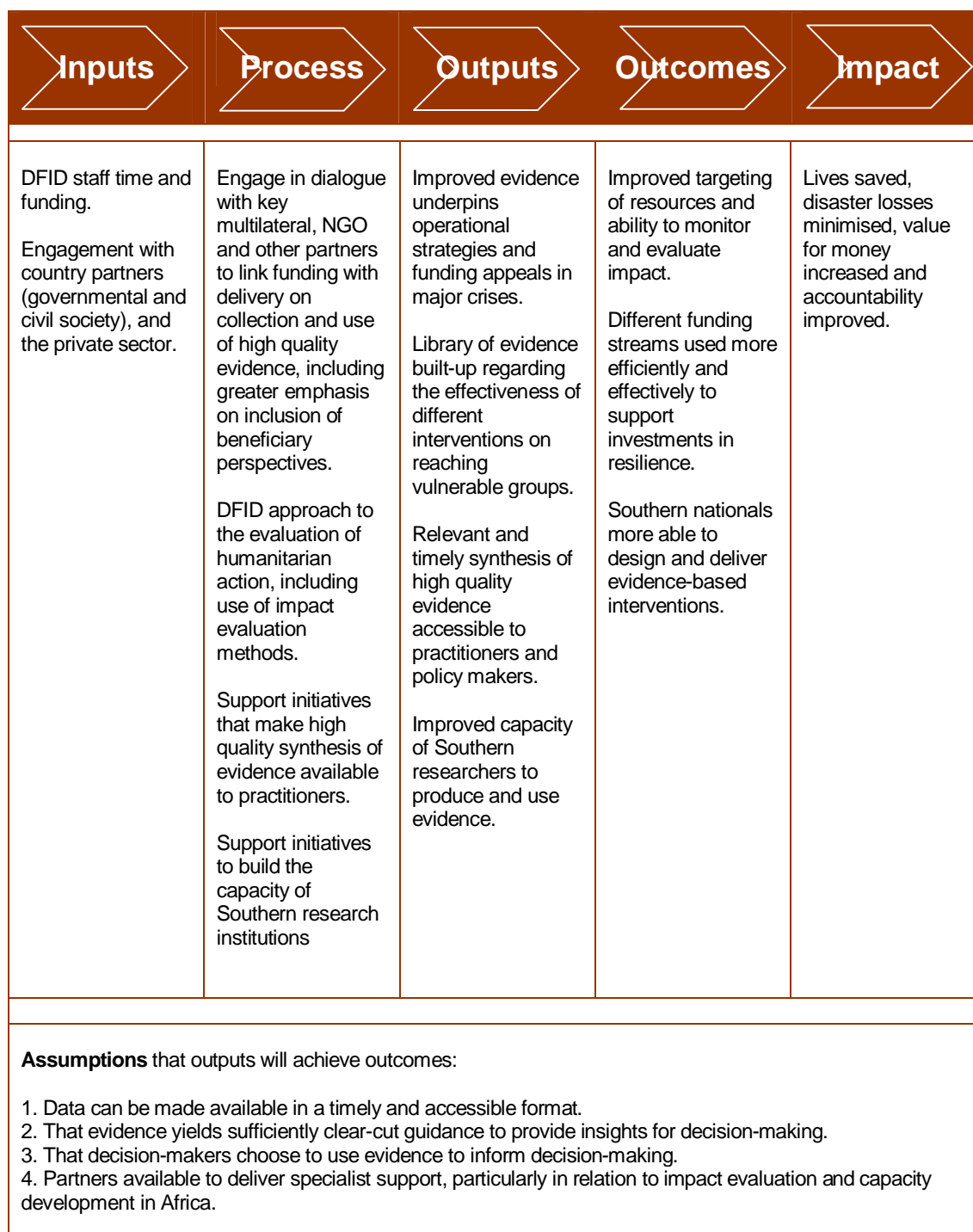
⁴⁶ See for example Walker, P. and C. Russ (2010). Professionalising the Humanitarian Sector: A Scoping Study. Report commissioned by ELRHA, April 2010.

⁴⁷ See Harvey, P. (2010) The State of the Humanitarian System, Assessing performance and progress A pilot Study. ALNAP and Clarke, P. and B. Ramalingham. Organisational change in the Humanitarian Sector, Chapter 2. ALNAP Review of Humanitarian Action; Walker, P. and C. Russ (2010). Professionalising the Humanitarian Sector: A Scoping Study. Report commissioned by ELRHA, April 2010.

3.6.2. What will we do and what do we hope to achieve?

- i. As a major funder of humanitarian assistance DFID can create the incentives to ensure that humanitarian decision-making is underpinned by high quality evidence at all stages of the project cycle. In particular we will:
 - Maintain a culture of openness to innovation and emphasis of the importance of reporting on failure as well as success in order to promote learning;
 - Increase the incentives for partners to demonstrate beneficiary involvement at all stages of the humanitarian cycle and continue to invest in new technologies;
 - Ensure that our funding instruments continue to reward partners who invest in professional development of their staff, including national staff in particular;
 - Continue to support the development of DFID staff through the humanitarian adviser cadre and other advisory cadres;
 - Review DFID's approach to the monitoring and evaluation of humanitarian assistance in order to deliver fewer, higher quality and more user-focused evaluations which focus attention on what works (and what doesn't);
 - Further encourage the cluster system to act as knowledge hubs and brokers in their sectors;
 - Work with partners to develop improved guidelines and standards for data collection
- ii. Invest in strengthening evaluation and impact assessment methodologies in relation to humanitarian action;
- iii. Invest in new and established initiatives that enable practitioners to access high quality evidence to inform their work, including research syntheses; and
- iv. Invest in capacity building of humanitarian professionals, researchers and evaluators, particularly Southern/national professionals.

Figure 6: Theory of change: Increasing the accessibility and use of evidence in humanitarian decision making



4. Delivering the strategy

4.1 Working in partnership

The HERR makes clear that a step change across the humanitarian system is required in order to meet the increasing humanitarian challenges we face. The nature and scale of humanitarian disasters is changing.

In implementing this strategy we aim to meet this challenge by helping to support a culture of innovation and a commitment to evidence-based practice in relation to disaster management and humanitarian action. This is not an aim that can be achieved in isolation, or through bilateral action alone. Strong partnerships will be essential for effective and appropriate humanitarian responses. A range of important partnerships and potentially effective collaborations exist.

The HERR notes that the Good Humanitarian Donorship (GHD) Group has a role to play in improving donor co-ordination on system-wide reform and during large-scale responses. In line with the UK Government's commitment to 'Work to maximise the potential of the Good Humanitarian Donorship group' we will work with member governments to build productive alliances to provide incentives for evidence-based practice within humanitarian organisations.

Despite some successful examples there are too few successful partnerships for humanitarian evidence and research both between institutions in the North and South, and between those in the South. We will work with partners in the developing world to enable South-South learning and knowledge exchange.

The HERR emphasises the potential of the private sector as a source of largely untapped capacity and expertise to reduce suffering, rebuild communities following disaster, and to mitigate disaster risk through prevention and preparedness. It highlights the need for new ways of engaging with the private sector including public private partnerships that enable risk sharing such as the CCRIF (see box 2). We will work to find new ways to engage with the private sector and to bring their skills and expertise into building resilience and crisis response. We will explore the potential to develop a partnership with the Technology Strategy Board in this regard.

Building a shared research agenda

Within the UK and beyond there are many existing capabilities and interests that can be drawn upon. There is considerable ongoing work aimed at improving our ability to anticipate critical hazards, including under the HMG Foresight Programme and through the work of the UK Research Councils as well as through on going DFID programmes and in other government departments (FCO, DEC, DEFRA etc.). The Government Office of Science is currently leading on the Foresight study of anticipation of extreme physical hazards which will consider the mechanisms for coordinating UK research investment in this area. While their work is continuing, we will work with others to build a shared research agenda around which we can align our efforts, including other major investors in research, and private foundations.

4.2 Managing Delivery within DFID

Delivery of the strategy will require engagement across the organisation, including CHASE, Regional Divisions and RED (including EvD). Responsibility for delivery will sit with the Head of CHASE (responsible for delivery of the HERR), with the Director of RED (Research and Cadres) and will draw on shared resources. At the working level the new Humanitarian Head of Profession and Senior Research Fellow will provide oversight of delivery.

Annex 1: Peer review group members

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Sarah Bailey	Overseas Development Institute
Andy Bastable	Oxfam
Charlotte Benson	Independent consultant
Steve Collins	Valid International
Tom Corsellis	Shelter Centre
Mark Cutts	OCHA
Steven Devereux	Institute of Development Studies
Roger Few	University of East Anglia
Jennifer Klot	Social Science Research Council
Dan Maxwell	Tufts University
Ben Ramalingam	ALNAP
Debi Sapir	CRED, University of Louvain
Jimmy Whitworth	Wellcome Trust

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Published by the Department for International Development, February 2012.