

Building resilience to natural disasters

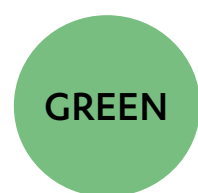
A performance review

February 2018

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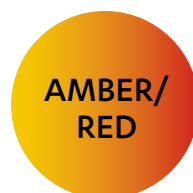
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Overall review scores and what they mean



GREEN

Strong achievement across the board. Stands out as an area of good practice where UK aid is making a significant positive contribution.



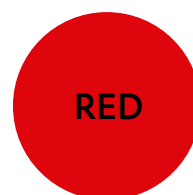
**AMBER/
RED**

Unsatisfactory achievement in most areas, with some positive elements. An area where improvements are required for UK aid to make a positive contribution.



**GREEN/
AMBER**

Satisfactory achievement in most areas, but partial achievement in others. An area where UK aid is making a positive contribution, but could do more.



RED

Poor achievement across most areas, with urgent remedial action required in some. An area where UK aid is failing to make a positive contribution.



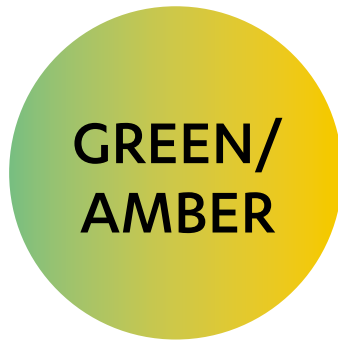
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DFID has taken a well-considered approach to mainstreaming resilience and its programming has generated good results. With the mainstreaming process over, weak monitoring procedures mean that there is a risk that progress may not be sustained.

Natural disasters are occurring at an increasing rate and harm the world's poorest countries and people disproportionately. Building resilience – reducing people's exposure to natural hazards and improving their ability to cope with and recover from shocks – is essential to achieving the Sustainable Development Goals. From 2011 to 2015, DFID mainstreamed resilience to natural disasters into its programmes and plans. It took a flexible, voluntary approach to mainstreaming, encouraging country offices to adapt the resilience agenda to their own priorities. Despite some missed opportunities, this approach was broadly effective.

DFID's humanitarian and climate-related programmes have the most explicit resilience objectives, and the strongest outcomes. Other sectors – such as social protection, health, water and education – give less consistent attention to resilience, but include many relevant and useful activities. In most of the countries in our sample DFID lacked clear strategies for approaching resilience at portfolio level. DFID has worked closely with national governments to coordinate and build capacity. It has helped to promote the inclusion of resilience into the global development agenda, including the Sustainable Development Goals. It is a global leader on risk-based financing, to support early response when disaster strikes.

While DFID generates knowledge and evidence from its resilience work, it is failing to synthesise and share learning systematically. Its evaluation and monitoring practices are insufficient to support its ambitious resilience objectives, and there is a risk that progress may not be sustained if attention to results measurement and learning is not improved.

Individual question scores

Question 1

Effectiveness: How well has DFID mainstreamed resilience to natural disasters across its work?

GREEN/
AMBER

Question 2

Effectiveness: How effectively is DFID supporting the implementation of resilience to natural disasters?

GREEN/
AMBER

Question 3

Learning: How well is DFID learning in its work on resilience to natural disasters?

AMBER/
RED

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Executive Summary

Natural disasters and climate-related extreme weather events are increasing in scale and frequency. In 2017, in a record hurricane season, hurricanes Harvey, Irma and Maria made landfall in the Atlantic, wreaking destruction on Caribbean islands in their wake. In South Asia, heavy monsoon rain with sudden extreme downpours took 1,200 lives and affected 40 million people.

The impacts of loss and damage caused by natural disasters fall disproportionately on the world's poorest. Low-income countries are less able to prepare for and respond to natural hazards, leading to greater loss of lives, homes and livelihoods when disasters strike, and to slower economic recovery in their aftermath. Within low-income countries, it is the poorest and most vulnerable who are most exposed to disasters and have fewest resources to support recovery.

While harm from natural hazards and climate-related events cannot be wholly avoided, their impact can be mitigated. Building resilience has become an important part of the global development agenda. It means reducing people's exposure to natural hazards and improving their ability to cope with, and recover from, shocks.

In 2011, the Department for International Development (DFID) decided that disaster resilience should be a central objective of both its development and its humanitarian programming. Between 2011 and 2015, it conducted a process of mainstreaming resilience objectives into all relevant programmes. This meant ensuring that investment decisions were informed by disaster risks and that programmes were designed or adapted to be resilient to natural hazards.

In this review, we assess the effectiveness of DFID's approach to building resilience. We analyse how well it conducted its resilience mainstreaming process and review how its programmes are contributing to building resilience. We focus on six country case studies: Bangladesh, Ethiopia, Mozambique, Nepal, the Occupied Palestinian Territories and Uganda. We also look at DFID's influencing activities and partnerships, and assess whether results monitoring and learning are helping to improve its work.

Effectiveness: How well has DFID mainstreamed resilience to natural disasters across its work?

DFID decided to take a flexible, phased approach to mainstreaming resilience, starting with a group of eight volunteer country offices that had identified resilience as a priority focus. These were supported by a UK-based team of resilience advisors and additional resources from a centrally managed Catalytic Fund. We drew our sample of country offices mainly from these 'Tier 1' countries, where resilience to natural disasters was considered to be a particular priority and where there was the longest track record of resilience work.

DFID's approach to mainstreaming proved to be broadly effective. It prioritised countries at particular risk from natural disasters, and it allowed DFID to test its strategy and build up a body of experience. Importantly, the flexibility given to country offices encouraged them to take ownership of the process. The best examples in our sample were Nepal, Uganda and Ethiopia, where long-term development prospects are closely linked to the successful management of natural hazards, and where each DFID office had developed a strong, context-appropriate resilience focus through mainstreaming resilience in its portfolio. DFID guidelines set out seven steps for mainstreaming resilience, from appointing an office champion to planning tools and programme design. These steps were largely followed in the country offices we reviewed. They all appointed a resilience champion and made efforts to put together resilience teams with members from both development and humanitarian programming. Their multi-hazard risk assessments and country resilience strategies were not very detailed, but in most cases these helped to establish a resilience narrative that was incorporated into country plans and programme designs. However, a planned central monitoring exercise on the mainstreaming process did not take place.

Our case study countries each took different approaches to mainstreaming. Nepal, Ethiopia and Uganda were particularly strong examples of a flexible, problem-solving approach to mainstreaming resilience. In Nepal, DFID took a twin-track approach: it developed new resilience-specific programming and also reviewed existing programmes to identify gaps and opportunities for promoting resilience. In Ethiopia, the country

office chose to embed resilience across all of its programming pillars and worked closely with the Ethiopian government to develop its resilience strategy. In Uganda, DFID has concentrated both humanitarian and development programmes into areas where the arrival of more than one million refugees from South Sudan could exacerbate existing vulnerabilities to drought.

However, the voluntary approach to mainstreaming also led to some gaps. Most of the country offices in our sample did not revisit ongoing programmes to incorporate resilience objectives. A small number of the programmes in our sample designed after the mainstreaming process began had also missed opportunities to address resilience. In recent programming, we saw some good examples of adaptive programme design to enable rapid changes in activities in response to natural disasters, but this is not yet standard practice.

DFID wrapped up its mainstreaming process in 2015, after concluding that resilience had been sufficiently embedded across central and country offices to become ‘business as usual’. The department’s 2017 humanitarian reform policy, *Saving lives, building resilience, reforming the system*, confirms the continued centrality of resilience in DFID’s aid strategy. However, the absence of mandatory requirements, the withdrawal of central support and the lack of monitoring or reporting create a risk that progress to date on mainstreaming resilience into DFID’s work may not be sustained.

Overall, we judge that DFID’s mainstreaming of resilience across its country offices and programmes has been broadly effective, but will require more proactive action to maintain momentum, meriting a **green-amber** score.

Effectiveness: How effectively is DFID supporting the implementation of resilience to natural disasters?

We assessed a sample of 53 DFID programmes in six countries to determine whether they included appropriate consideration of resilience, and whether they were making progress towards their resilience-related objectives. DFID’s humanitarian programmes and its work on climate and the environment have the most explicit resilience objectives, which are supported by a range of relevant activities. In spite of inadequacies in formal results measurement, we assessed that the resilience components of these programmes were generally performing well, and were likely to contribute to reducing the impact of disasters, strengthening preparedness or increasing the resilience of the targeted communities. There are some particularly strong examples in the portfolio, including an investment in earthquake preparedness in the Kathmandu Valley in Nepal that proved highly significant when a major earthquake struck in April 2015.

In programmes in other sectors – such as social protection, health, water, education, infrastructure and governance – we found that the practice was not as consistent. In our sample, these tended to include resilience objectives as an indirect benefit, and resilience outcomes were usually not captured by DFID’s monitoring and reporting practices. We nonetheless found that the majority of these programmes included activities that were likely to strengthen resilience, including earthquake-proofing of hospitals, improved design of infrastructure and a range of engagements with local communities to diversify livelihoods and reduce vulnerability.

Both DFID and the general literature on resilience to natural disasters emphasise the importance of taking a portfolio approach to strengthening resilience, so as to improve complementarity and links between different sectoral programmes. But only two countries in our sample, Uganda and Ethiopia, had explicit strategies for doing so.

Across our sample, we found that DFID plays an important role in convening development partners and improving coordination on resilience to natural disasters. It has also increased its investment in strengthening the capacity of national governments in this area. Though progress at this level is often challenging, we found DFID’s capacity building work to be politically informed and well designed, engaging at multiple levels of government to improve the chances of impact.

At the global level, DFID has played a useful role through its centrally managed programmes in strengthening global action on resilience. It co-chaired the Political Champions for Disaster Resilience, which helped to integrate resilience into the global development agenda, including the Sustainable Development Goals. DFID has also played an influential role in developing and evidencing new risk management approaches, and has become a global leader on parametric insurance (which pays out at the onset of climate-related events such as droughts, to provide resources for mitigating their impact).

Overall, we have given DFID a **green-amber** score for the effectiveness of its work on resilience to natural disasters, reflecting a range of strong results, but with scope for improvement, particularly in relation to incorporating resilience into other sectoral programmes.

Learning: How well is DFID learning in its resilience to natural disasters work?

While DFID has generated a substantial amount of knowledge and evidence from its work on resilience, its approach to learning has been inconsistent. The centrally managed programmes we reviewed are making an important contribution to building the global evidence base and the value for money case for investing in resilience. In our case study countries, we saw good examples of knowledge generation and learning within just over half the humanitarian and climate-related programmes we reviewed. But there was little evidence of knowledge sharing between programmes, between countries, or between country offices and DFID UK headquarters. Overall, our findings show that DFID is failing to routinely gather, synthesise and communicate its growing knowledge base on resilience. As a consequence, DFID and its partners are missing out on opportunities to strengthen their programmes.

Resilience is a complex outcome to measure through programme monitoring frameworks and, like other donors, DFID has found this challenging. It is taking steps to address this by developing new methodologies to measure changes in resilience, and by contracting out monitoring, evaluation and learning. However, we expected more progress to have occurred, considering that more than six years have passed since DFID first decided to mainstream resilience.

We have therefore given DFID an **amber-red** score for learning. We acknowledge that DFID has made an important contribution to knowledge on resilience to natural disasters at the global level. We are also aware that measuring resilience to natural disasters is not an easy task. Nonetheless, we find that DFID has not given enough emphasis to the capture and dissemination of results from its own programming. In our view, DFID's commitment to resilience to natural disasters calls for stronger results measurement practices.

Conclusion and recommendations

Overall, we find that DFID has taken a well-considered approach to mainstreaming resilience, resulting in a good level of focus in the countries we reviewed. Its programming has generated some important results, and has the potential to make significant contributions in a range of areas. However, with the mainstreaming process now over, there is a risk that practice may slip backwards. There are gaps in DFID's results monitoring practices, at both programme and portfolio level, and in its learning processes. This merits an overall **green-amber** score.

We make the following recommendations, to strengthen DFID's continuing work on resilience.

Recommendation 1

In partner countries with significant risks from natural disasters, DFID should keep its risk assessments and resilience strategies up to date, working where possible in conjunction with national governments and other development partners.

Recommendation 2

DFID offices in high-risk countries should adopt a portfolio approach to resilience, articulating how their efforts in different sectors and areas will work together to build resilience.

Recommendation 3

DFID should develop its guidance on how to measure resilience results, providing options that can be adopted by country offices according to their contexts and needs.

Recommendation 4

DFID should undertake a stocktake of its work on resilience in high-risk countries to assess the contribution of its programming and influencing activity to building resilience and disaster preparedness, to inform its country strategies. This could be done periodically, or following significant natural disasters.

Recommendation 5

DFID should establish a community of practice to promote the continuing mainstreaming of resilience to natural disasters and provide technical and expert support to the dissemination of knowledge and evidence.

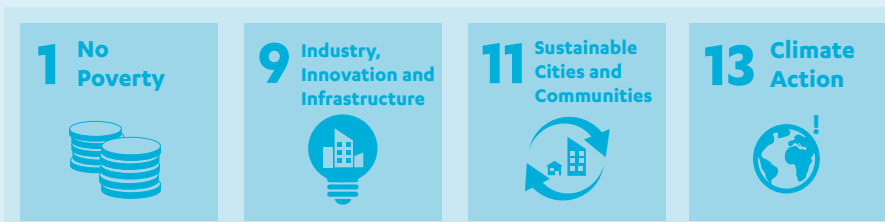
1 Introduction

- 1.1 The impacts of natural disasters and climate-related events are large and growing. In 2015 alone, there were more than 500 disasters worldwide caused by earthquakes, floods, landslides and heatwaves, killing some 32,500 people, affecting 108 million and causing over £52 billion in damage.¹ While geophysical disasters such as earthquakes, tsunamis and volcanic eruptions occur at a broadly steady rate, the number of climate-related disasters caused by events such as floods and storms has been rising sharply. From 2000 to 2015, there were an average of 341 climate-related disasters each year – an increase of 44% from the 1994-2000 average.²
- 1.2 These events have a disproportionate effect on developing countries, which are more vulnerable to their impact and have fewer resources to support recovery. This was recognised in the wording of the Sustainable Development Goals (SDGs), which includes several references to resilience (see Box 1). Following their adoption in 2015, the international development community signed the Sendai Framework for Disaster Risk Reduction, a voluntary agreement to build resilience and substantially reduce the loss of lives, livelihoods and health caused by disasters over a 15-year period (2015-30).³
- 1.3 Given the impact of disasters on development and the high cost of disaster recovery, the economic case for investing in disaster prevention and preparedness is strong. However, it remains an area of underinvestment in global development assistance.⁴

Box 1: Resilience and the Sustainable Development Goals

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

Related to this review



SDG 1 sets out “to end poverty in all its forms”. One of its targets is to “build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters”.

SDG 9 has as a target to “build resilient infrastructure”.

SDG 11, on sustainable cities and communities, aims to “significantly reduce” the number of people killed or harmed by disasters, including protecting those most vulnerable to natural hazards. It also aims to “substantially decrease the direct economic losses” that such disasters cause.

SDG 13 calls for “urgent action to combat climate change and its impact”. One of its targets is to “strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries”.

In addition to these explicit resilience goals and targets, the aim to make the world’s poorest and most vulnerable better able to withstand and recover from shocks and disasters runs through the SDGs and their promise to “leave no one behind”.

1. *World Disasters Report - Resilience: Saving lives today, investing for tomorrow*, International Federation of Red Cross and Red Crescent Societies, 2016, [link](#).
2. *The human cost of natural disasters 2015: a global perspective*, Centre for Research on the Epidemiology of Disasters, 2015, p. 7, [link](#).
3. *The Sendai Framework for Disaster Risk Reduction*, United Nations Office for Disaster Risk Reduction (UNISDR), 2015, [link](#).
4. *Financing Disaster Risk Reduction: A 20-year story of international aid*, Overseas Development Institute (ODI) and Global Facility for Disaster Reduction and Recovery (GFDRR), 2013, [link](#).

- 1.4 In 2011, DFID set itself the objective of incorporating resilience to natural disasters into its programming. A March 2011 review of DFID’s emergency response capacity emphasised the importance of building capacity to predict and prepare for future disasters.⁵ It recommended that resilience to natural disasters be made central to both development and humanitarian programming.
- 1.5 This is a review of DFID’s work on resilience to natural disasters. It is a performance review (see Box 2 for our types of reviews). We examine how well DFID has incorporated resilience to natural disasters into its programming, whether its efforts are helping to reduce the risk of harm from natural hazards facing poor people in its partner countries, and how well DFID is learning in its work on resilience. Our review questions are set out in Table 1. This review complements a 2016 report by the National Audit Office on DFID’s response to crises.⁶ It does not look at resilience to conflict, although we acknowledge that in some contexts the two are closely interrelated.

Table 1: Our review questions

Review criteria and questions	Sub-questions
1. Effectiveness: How well has DFID mainstreamed resilience to natural disasters across its work?	<ul style="list-style-type: none"> How well has DFID integrated resilience to natural disasters at a strategic and operational level? To what extent are the allocated resources adequate to meet DFID’s commitments on the resilience agenda?
2. Effectiveness: How effectively is DFID supporting the implementation of resilience to natural disasters?	<ul style="list-style-type: none"> To what extent is DFID achieving its resilience to natural disasters objectives? How well is DFID helping national and local partners build sustainable capacity for resilience to natural disasters? How well is DFID coordinating its disaster resilience work with other donors and multilateral partners?
3. Learning: How well is DFID learning in its work on resilience to natural disasters?	<ul style="list-style-type: none"> How well is DFID capturing lessons from its resilience to natural disasters work and applying them to its programming and influencing? Are credible arrangements in place to measure results and maximise value for money in DFID’s work to strengthen resilience to natural disasters?

Box 2: What is an ICAI performance review?

ICAI performance reviews take a rigorous look at the efficiency and effectiveness of UK aid delivery, with a strong focus on accountability. They also examine core business processes and explore whether systems, capacities and practices are robust enough to deliver effective assistance with good value for money.

Other types of ICAI reviews include **impact reviews**, which examine results claims made for UK aid to assess their credibility and their significance for the intended beneficiaries, **learning reviews**, which explore how knowledge is generated on new or recent challenges for the UK aid programme and translated into credible programming, and **rapid reviews**, which are short, real-time reviews examining an emerging issue or area of UK aid spending.

5. Humanitarian Emergency Response Review, UK Government, March 2011, [link](#).

6. Department for International Development: Responding to crises, NAO, 2016, [link](#).

2 Methodology

2.1 There were three methodological components to our review.

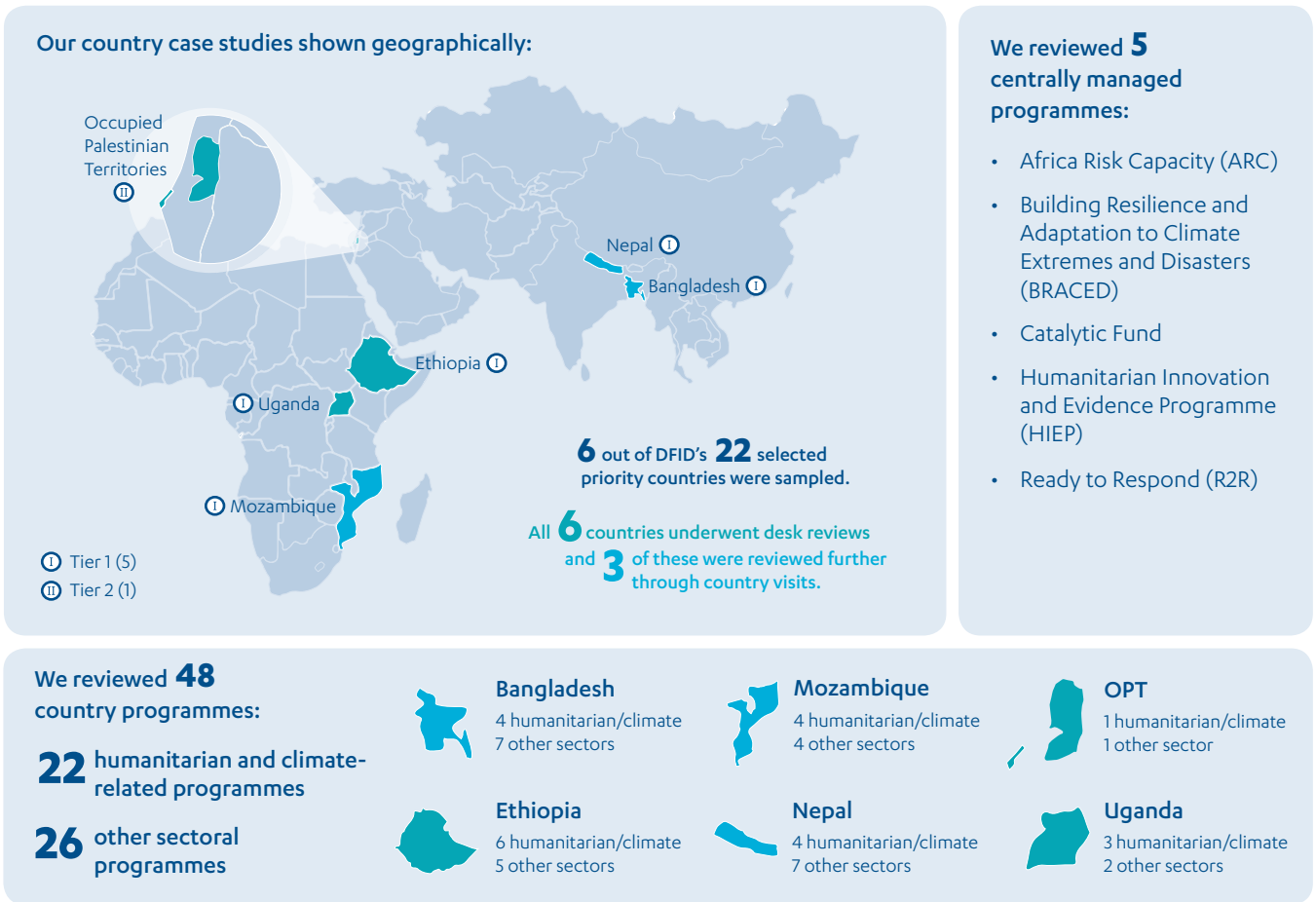
- **Literature review:** In order to identify current trends and good practices, we undertook an analysis of the literature on resilience to natural disasters. The literature review covered changes in the global policy environment and the implications these had for DFID and its development partners. It also examined the cross-cutting nature of resilience and the challenges of monitoring and measurement. This provided a reference point for assessing the coherence and effectiveness of DFID's programmes and complemented the evidence gathered on learning.
- **Strategy review:** We examined DFID's evolving approach to resilience to natural disasters through desk reviews of its relevant policies, strategies and guidance, and through consultations with DFID and other stakeholders in the UK. We reviewed DFID's approach to integrating resilience into its programming, and whether it has been implemented and sustained. We reviewed DFID's risk analysis, the level of emphasis given to resilience over time, and how well the department has learnt from international evidence and from its own experience. We explored DFID's coordination and influencing work at the international level.
- **Programme reviews:** We reviewed a sample of five centrally managed programmes and 48 country-level programmes, as well as associated influencing efforts, in six countries (see Figure 1). For three of these countries (Ethiopia, the Occupied Palestinian Territories and Uganda), these assessments were conducted through desk reviews. For the other three countries (Bangladesh, Mozambique and Nepal), we also conducted country visits. The assessments included detailed reviews of most of DFID's humanitarian and climate-related programmes, an in-depth review of a small sample of other sectoral programmes and a light-touch review of other relevant sectoral programmes (see Annex 2 for a full list of the programmes reviewed). Each of the visits included interviews with internal DFID staff and external stakeholders in the national capital and programme visits with DFID's partners at field level. These visits also included interviews with communities targeted by these programmes. Afghanistan was initially selected as a case study country, but was removed at DFID's request owing to the security challenges facing the country office.

Box 3: Limitations of our methodology

DFID chose a phased, voluntary approach to mainstreaming resilience to natural disasters into country portfolios. Eight country offices that had identified resilience to natural disasters as a high priority volunteered for the first phase (Tier 1) of mainstreaming. Others followed in two later phases (Tier 2 and Tier 3), while a small number decided that it was not necessary or appropriate to do so (countries dealing with other types of crises, such as conflict or the Ebola epidemic). Our sample comprises five Tier 1 countries, which have the longest track record of resilience work for us to review, and one Tier 2 country. This means that we focus on countries where DFID identified resilience as a priority, rather than attempting to assess performance across all DFID country offices.

Resilience is a complex outcome of many different institutional, economic and social changes, and is therefore difficult to measure. DFID's resilience programmes, like those of other donors, often lack strong data on outcomes and impact. This complicated our task of reviewing programme effectiveness. We sought to overcome the dearth of data by assessing how well the activities of the sampled programmes reflected the current body of academic research on best practices and evaluative evidence on what works. We also assessed the quality of programme implementation during our field visits. However, where robust results data did not exist, our judgments have had to rely on extrapolations and inferences.

Figure 1: Country case study overview



3 Background

Building resilience has become a core objective for both development and humanitarian programming

- 3.1 Resilience to natural disasters first appeared on the international development agenda when the United Nations declared the 1990s the International Decade for Natural Disaster Reduction.⁷ International action in support of resilience to natural disasters has gained momentum ever since. In May 1994, the Yokohama Strategy and Plan of Action for a Safer World was adopted,⁸ followed in 2005 by the Hyogo Framework for Action – a ten-year plan to make the world safer from natural disasters.⁹ In 2015, the Sendai Framework for Disaster Risk Reduction laid out a 15-year action plan focused on reducing existing disaster risks and preventing new risks from emerging.¹⁰ Resilience also features strongly in the Paris Agreement under the United Nations Framework Convention on Climate Change and in the Sustainable Development Goals, both also adopted in 2015.
- 3.2 These agreements reflect international concern about the growing frequency of natural disasters and extreme weather events and at their devastating impact on lives and livelihoods. Resilience has emerged as a theme that runs across both development and humanitarian assistance, linking these two still largely separate spheres of activity. It offers the potential to break out of the cycle of responding to disasters once they have occurred, which is wasteful of lives and resources. However, the level of investment remains well below the levels required. In 2015, international aid statistics showed that donors invested just £400 million directly into disaster prevention and preparedness, little more than 0.5% of total donor assistance.¹¹

“We know prevention is better than cure. International humanitarian assistance to respond to crises should be the exception, not the norm. Investing political and financial resources in anticipating, preventing, mitigating, and preparing for disasters is key to reducing humanitarian need.”

Saving lives, building resilience, reforming the system: the UK government’s humanitarian reform policy, DFID, September 2017, [link](#).

- 3.3 Bangladesh, which is prone to catastrophic flooding, is an example of a country that has made major progress on resilience to natural disasters. In 1970, Cyclone Bhola took between 300,000 and 500,000 lives. Since then, better preparedness – such as flood defences, early warning systems and community cyclone shelters – has dramatically reduced the impact of cyclones. There were just 190 deaths in Cyclone Aila in 2009, compared to 3,000 in Cyclone Sidr in 2007.¹² While cyclones vary in intensity, the reduced death count is widely attributed to improvements in disaster preparedness.

7. International Decade for Natural Disaster Reduction, UN General Assembly, 1989, [link](#).

8. Yokohama Strategy and Plan of Action for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation, World Conference on Natural Disaster Reduction, May 1994, [link](#).

9. Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disaster, World Conference on Disaster Risk Reduction, Japan, 2005, [link](#).

10. Sendai Framework for Disaster Risk Reduction 2015-30, United Nations, 2015, [link](#).

11. Query Wizard for International Development Statistics, OECD, 2017, [link](#).

12. World Disasters Report - Resilience: Saving lives today, investing for tomorrow, International Federation of Red Cross and Red Crescent Societies, 2016, [link](#).

Integrating resilience into humanitarian and development programming is a significant organisational challenge

- 3.4 For aid agencies, integrating or mainstreaming resilience to natural disasters into their work is a significant organisational undertaking. Building resilience is by its nature a multidimensional process, requiring interventions across a range of sectors, bridging the traditional divide between development and humanitarian assistance. While there is a need for programmes that directly address the issue, for example by building national disaster response mechanisms, resilience also calls for a new way of thinking about programming across the board. Organisations need to develop a keen awareness of climate change and natural disaster risks and to integrate a risk management perspective throughout their programming.
- 3.5 Many donors and non-governmental organisations have adopted strategies or action plans to support the mainstreaming of resilience. They have developed guides and methodologies, and systems for sharing learning. As with other issues that have been mainstreamed, such as gender equality, experience suggests that incentives need to be created for staff to ‘own’ the resilience agenda, so that the focus is not lost during programme implementation.¹³
- 3.6 Guidance on mainstreaming resilience developed by the Red Cross shows some of the dimensions of the process (see Table 2).¹⁴

Table 2: Changes required for the effective mainstreaming of resilience (Red Cross guidance)

Area of change	Guidance on effective mainstreaming
Policies and strategies	The mainstreaming process must be guided by policies that set out broad objectives and provide a mandate for leaders and managers.
Leadership and management	The commitment and support of the leadership is necessary for resilience to gain profile in the short term and for mainstreaming progress to be maintained in the long term.
Resourcing and capacity	Mainstreaming needs to be adequately resourced and owned by all parts of an institution, with coordination and progress monitoring by an overarching body. Capacity, skills and knowledge must be built.
Project cycle and business processes	For mainstreaming to be successful, it must be evident at all phases of project cycle management. Business processes must support resilience.

DFID has made resilience a key objective of its programming

- 3.7 The UK’s 2011 Humanitarian Emergency Response Review argued that resilience should be an objective of all of DFID’s development and humanitarian programming. DFID responded by incorporating resilience into its 2011 humanitarian policy and writing an approach paper, also published in 2011, setting out how the department would integrate resilience to natural disasters across all relevant programming.¹⁵
- 3.8 Resilience has remained a prominent objective for DFID. The 2015 UK aid strategy has “strengthening resilience and response to crises” as one of four strategic objectives for UK aid.¹⁶ DFID’s 2017 humanitarian reform policy, *Saving lives, building resilience, reforming the system: the UK government’s humanitarian reform policy*,¹⁷ places emergency preparedness and building resilience at the forefront of DFID’s programming. It also emphasises the importance of UK influencing activities to reform the international humanitarian system.

¹³ *Resilience in Practice: Saving lives and improving livelihoods*, European Commission, October 2015, [link](#).

¹⁴ *A guide to mainstreaming disaster risk reduction and climate change adaptation*, International Committee of Red Cross and Red Crescent Societies, 2013, [link](#).

¹⁵ *Defining disaster resilience: A DFID approach paper*, DFID, 2011, [link](#).

¹⁶ *UK aid: tackling global challenges in the national interest*, HM Treasury and DFID, November 2015, [link](#).

¹⁷ *Saving lives, building resilience, reforming the system: the UK government’s humanitarian reform policy*, DFID, 2017, [link](#).

3.9 DFID defines resilience as “the ability of countries, communities and households to manage change by maintaining or transforming living standards in the face of shocks or stresses without compromising their long-term prospects”.¹⁸ This includes:

- **Adapting** to long-term changes well in advance, changing or diversifying livelihoods and ensuring infrastructure is fit for purpose.
- **Anticipating** and reducing the impact of climate variability and extremes through effective forecasting and preparedness measures.
- **Absorbing** the effects of climate extremes and disasters through effective and rapid response that enables people to cope with disaster and recover quickly.
- **Responding** when disaster strikes. Providing sufficient and predictable multi-year humanitarian financing in line with the Grand Bargain agreements.¹⁹

Box 4: Examples of measures to improve resilience

DFID recognises that building resilience into its country programmes requires a multilayered approach to programming. Examples include:

Before a crisis: Invest in long-term disaster preparedness. For instance, DFID health programming in Nepal includes a project to earthquake-proof hospitals across the country. In Uganda, DFID has brought together its resilience programmes and its refugee emergency programmes to improve livelihood opportunities for both refugees and their host communities. It aims to diversify livelihoods and increase prosperity so that communities can survive droughts and other extreme weather without resorting to negative coping mechanisms such as slaughtering or selling the livestock on which they depend.

Early on in a crisis: Initiate rapid response and trigger risk financing. For instance, in Mozambique DFID has supported the UN Resident Coordinator’s Office by funding posts for multilateral humanitarian coordination. DFID is also at the forefront of international efforts to establish new insurance instruments (known as parametric insurance), where payments are made at the outset of a crisis when the funds are most needed.

During a crisis: Provide humanitarian financing and adapt and modify programmes. For instance, DFID was the first donor to respond to the drought in Mozambique in 2015-16 because it had the flexibility to reassign funding between programmes.

DFID went through a resilience mainstreaming exercise between 2011 and 2015

3.10 DFID went through a process of mainstreaming resilience into its programming in the four years following the 2011 Humanitarian Emergency Response Review. Figure 2 sets out the timeline for this process. It started with eight country offices that had identified resilience as a priority area: Bangladesh, Ethiopia, Kenya, Malawi, Mozambique, Nepal, Sudan and Uganda (Tier 1 countries). These began the mainstreaming process in late 2011. A further seven countries (Tier 2) began the process in March 2013 (Burma, Democratic Republic of Congo, the Occupied Palestinian Territories, Pakistan, Somalia, South Sudan and Yemen). A final set of countries (Tier 3) began in December 2013. These included Afghanistan, Nigeria, Rwanda and Zambia, as well as the Central Asia Region (Tajikistan and Kyrgyzstan).

3.11 DFID produced a set of guidelines for its country offices on how to go about the mainstreaming process. It identified seven steps:

- designate an office champion for resilience to natural disasters
- carry out a multi-hazard risk assessment

¹⁸. *What is resilience? Evidence on demand*, Sturgess, P. and Sparrey, R., DFID, 2016, p.7, [link](#). The Organisation for Economic Cooperation and Development offers a similar definition: “the ability of households, communities and nations to absorb and recover from shocks, whilst positively adapting and transforming their structures and means for living in the face of long-term stresses, change and uncertainty”. *Risk and Resilience*, OECD, 2017, [link](#).

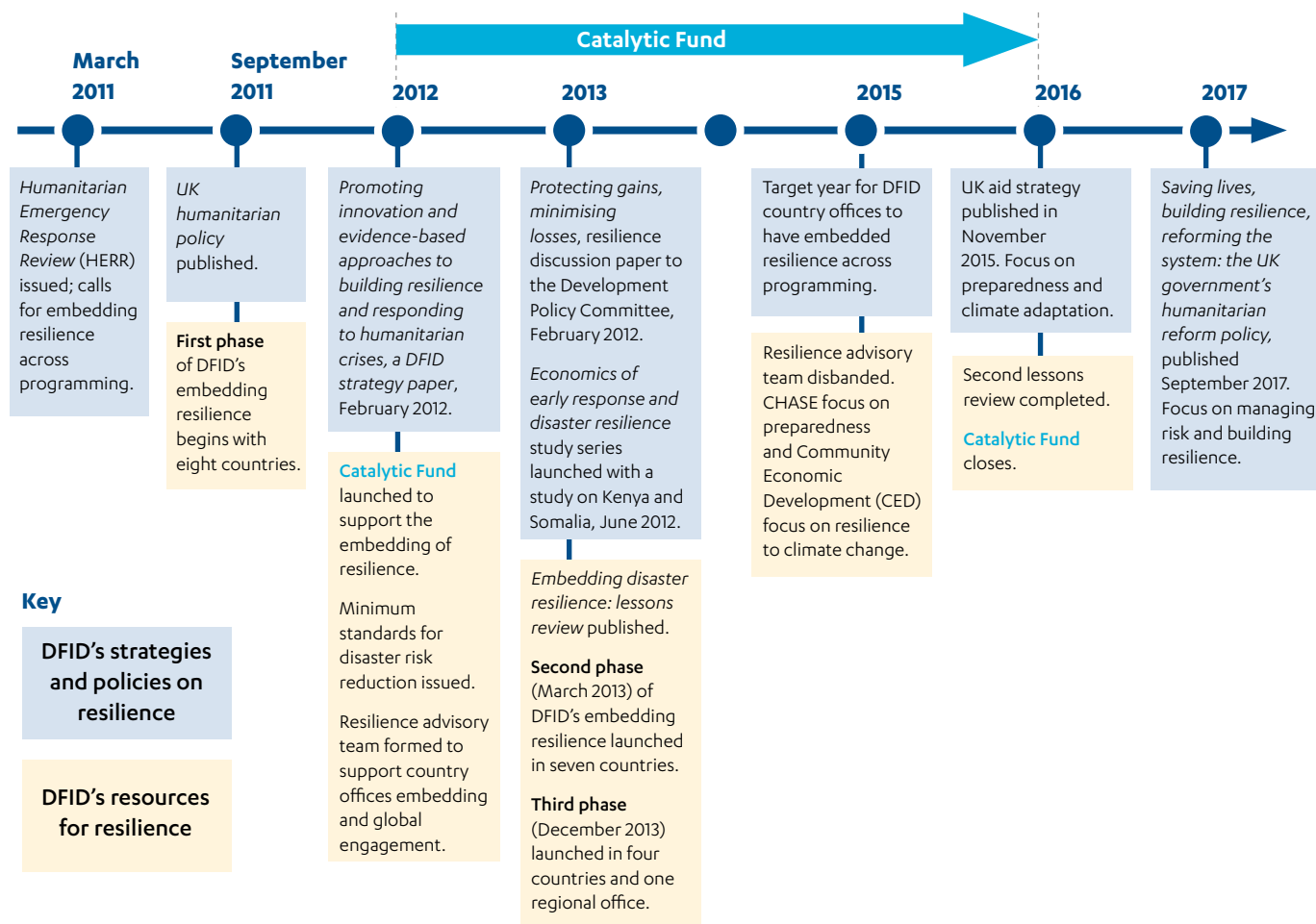
¹⁹. The Grand Bargain is an agreement among major donors and aid providers to increase humanitarian funding, make funding streams more predictable, reduce bureaucracy and earmarking, and channel more funding through national and local aid providers, [link](#).

- develop a country/regional strategy for resilience to natural disasters
- disaster-proof new business cases
- develop new programmes and adapt existing programmes to support resilience to natural disasters
- develop an emergency humanitarian response plan
- contribute to bi-annual reporting to ministers on resilience to natural disasters.

3.12 To support the process, it established a resilience advisory team at its UK headquarters, to provide technical advice to country offices and to lead on global engagement. It also established a centrally managed Catalytic Fund. This fund disbursed just over £2.5 million to cover some of the non-programming costs incurred by country offices through the mainstreaming process, such as analytical work and risk assessments. It also funded some pilot programming and engagement with other donors and multilateral partners.

3.13 By 2015, the mainstreaming period came to an end. The Catalytic Fund was wound up and the resilience team disbanded. While DFID remained committed to the resilience agenda, it took the view that the mainstreaming process was sufficiently advanced that it no longer needed dedicated resources at headquarters level.

Figure 2: Timeline of disaster resilience in DFID programming



4 Findings

Effectiveness: How well has DFID mainstreamed resilience to natural disasters across its work?

4.1 Following the 2011 Humanitarian Emergency Response Review, DFID made a sustained effort to mainstream resilience into its humanitarian and development assistance. This section reviews the approach adopted by DFID, how well it was organised, and how successful it was at the central level and in our case study countries.

DFID's voluntary approach to mainstreaming helped generate ownership by country offices

4.2 DFID decided to take a flexible approach to mainstreaming resilience. Rather than launching a mandatory exercise across all its country programmes, it started with a group of eight volunteer country offices (Tier 1) that had identified resilience as a priority. These volunteers were given technical support from a resilience team and access to additional financial resources from the Catalytic Fund. The steps involved in mainstreaming were described as 'minimum standards', but in practice served as guidelines. Our sampled countries adapted them for their own purposes, and ended up taking some quite different approaches to the process.

4.3 We are satisfied that this was a sensible approach to mainstreaming. It allowed DFID to test its approach with a limited number of countries and to build up a body of knowledge and experience that others could draw on. It also meant that the country offices that chose to opt in had greater ownership of the process – which the literature confirms is a precondition for successful mainstreaming. Moving straight to a mandatory process (for example by making resilience a required element of every programme business case) before engagement and understanding had been built across the department would have risked a superficial response.

4.4 The first tier of countries to volunteer for mainstreaming did so based on their own assessment of the importance of the resilience agenda in their country, together with other factors such as the size of their portfolio of bilateral aid programmes. Countries that were more concerned with conflict risk, such as the Occupied Palestinian Territories and South Sudan, did not engage in this first phase. The selection of countries was consequently not based on an objective assessment of risk. However, we are satisfied that it resulted in DFID concentrating its efforts on countries at higher risk of natural disasters, where development outcomes depend on the successful management of these risks, such as Nepal, Bangladesh and Ethiopia. However, for reasons set out below, the voluntary process did not result in consistent engagement with resilience across the portfolio, and has left a continuing risk that the focus might weaken over time.

Risk assessment and resilience planning were carried out at a basic level but have not been updated

4.5 We found that the majority of steps or 'minimum standards' in DFID's mainstreaming guidance were broadly followed, but not consistently. Table 3 summarises the results of our assessment in our six case study countries.

Table 3: Progress against the mainstreaming process in our case study countries

Mainstreaming steps	Progress achieved
1 Designate an office champion for resilience to natural disasters	Completed
2 Carry out a multi-hazard risk assessment	Completed
3 Develop a country strategy on resilience to natural disasters	Completed, but mixed quality
4 Disaster-proof new business cases	Mostly completed
5 Develop new programmes and adapt existing programmes	Partial progress
6 Develop an emergency humanitarian response plan	Completed
7 Contribute to bi-annual reporting to ministers on resilience to natural disasters	Not done

- 4.6 All of the country offices we reviewed had carried out assessments of the key risks facing the country, drawing on a range of available data and evidence. They did not go as far as to include detailed spatial analysis of the risks or in-depth assessment of the national institutional capacity to manage them. They were not fully ‘multi-hazard’, as the term is generally understood: while they listed risks, they did not explore the interaction between them. Despite these shortcomings, the assessments collected the available information on disaster risk and provided a sufficiently cogent core of information on which resilience strategies could be developed.
- 4.7 These strategies were relatively short documents of seven to nine pages. The analysis and strategies were not subject to any form of peer review, and we found them to be of mixed quality. A few were little more than checklists of actions to be taken in support of mainstreaming. The stronger ones articulated a resilience narrative for the country programme, addressing how natural disaster risk constrained development prospects and identifying opportunities where investments in disaster preparedness could save lives and reduce the costs of emergency response. DFID Ethiopia went a step further and analysed risks and resilience needs at different income levels (see Figure 3).
- 4.8 The strategies were then reflected in country plans and in the business cases of resilience programmes. We found that resilience to natural disasters was a prominent feature in five of the six 2016-20 DFID country office business plans that we reviewed (the plan for the Occupied Palestinian Territories instead focused on conflict risk, which was understandable). For those five countries, the resilience strategies therefore proved a useful first step for focusing attention on the resilience challenge.
- 4.9 In our case study countries, the risk assessments and resilience strategies have not been renewed since they were first prepared in 2012-13, even after significant disasters such as the El Niño drought in Mozambique. Because the mainstreaming exercise was seen as a time-limited process, there was no commitment to keeping them updated. This is a shortcoming that will need to be addressed if DFID’s resilience work is to remain up to date.

Country office teams were reorganised to promote cross-sector work on resilience

- 4.10 DFID’s guidelines on mainstreaming specified that an office champion for resilience should be appointed. This was done in all of our case study countries. The champions usually came from the development side of the office, which helped to ensure that resilience did not remain the preserve of the humanitarian team.
- 4.11 We also found that the country offices we reviewed encouraged a more joined-up approach to resilience by establishing or modifying cross-sector teams. For example, Nepal formed a humanitarian and climate team, which has recently been expanded to include staff working on inclusive growth. In Bangladesh, the existing climate change and disaster resilience team was merged with the extreme poverty team. This creation of cross-sectoral, multidisciplinary teams is a strong element of DFID’s mainstreaming approach.
- 4.12 DFID never established a central mechanism for monitoring the progress of the mainstreaming effort or how its country programmes were contributing to resilience. The planned bi-annual reporting to ministers on resilience to natural disasters was not done.

Each of the country offices we reviewed followed its own approach to mainstreaming resilience in programming

- 4.13 Our case study countries each took a context-specific approach to the mainstreaming challenge. For example, the Nepal country office took a twin-track approach. It developed a number of new programmes designed to strengthen Nepal’s resilience to earthquakes, including an investment in a logistical base in the Kathmandu Valley that proved highly significant during the April 2015 earthquake (see the next section for our analysis of its effectiveness). These investments reflected the adoption of a ‘no regrets’ approach to resilience to natural disasters: a willingness to make upfront investments in preparedness and to preposition supplies, even though disasters such as earthquakes are unpredictable and the investment may never be needed. We have found that a ‘no regrets’ approach was common across our case study countries and programmes. It has now been incorporated into DFID’s 2017 *Humanitarian reform policy*.

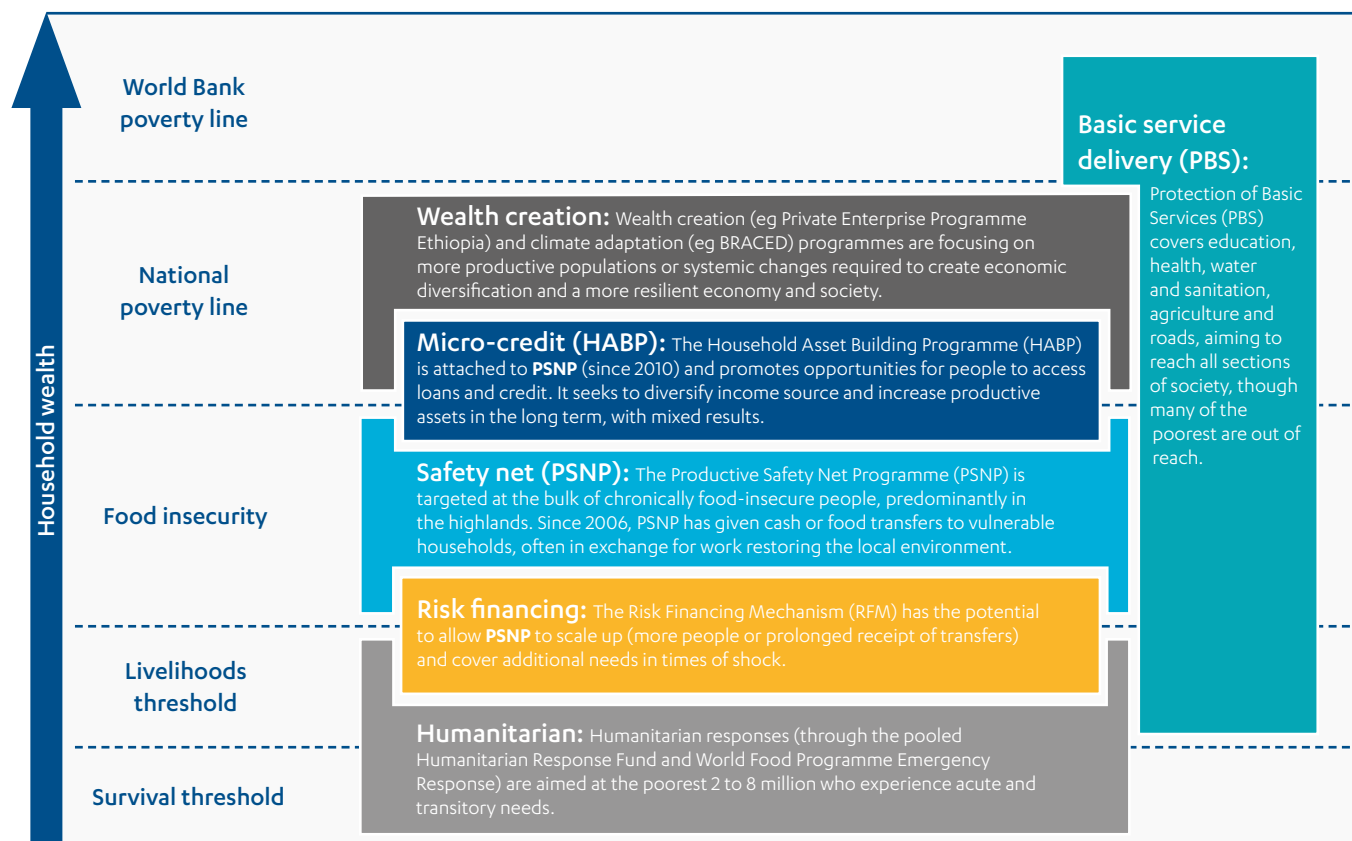
“When needs are urgent, we adopt a ‘no regrets’ policy in response to rapid onset disasters; we rapidly frontload funding, relief supplies, and expertise in support of government, UN, Red Cross and NGO partners on the ground to save lives and restore dignity.”

Saving lives, building resilience, reforming the system: the UK government’s humanitarian reform policy, DFID, September 2017, [link](#).

4.14 DFID Nepal also reviewed its new and existing programmes to identify opportunities to incorporate resilience. It modified the specifications of investments in hospitals to make them more earthquake-proof. In its Community Support programme, it added training on disaster management, early warning, first aid and light search and rescue, and support for the development of community action plans for disaster preparedness. In its Local Governance and Community Development programme, DFID Nepal sought to influence and improve local government policy on disaster risk reduction and to ensure that local infrastructure projects were disaster-resilient. We found this to be a strong example of mainstreaming resilience.

Figure 3: Cross-sectoral approach to building resilience in Ethiopia

The diagram below maps out how different DFID programmes in Ethiopia target vulnerable households of various wealth levels at or below the World Bank poverty line to build their resilience to disasters. Resilience can be further promoted by fostering links between these programmes.



Source: DFID Evidence on Demand Topic Guide - What is resilience?, May 2016, p. 45, [link](#).

- 4.15 DFID Ethiopia took a different approach to mainstreaming. Rather than creating a dedicated team, it chose to embed resilience across all of its programming pillars. It used a disaster resilience framework to analyse risks and resilience needs at different levels of income (see Figure 3), in relation to both natural disasters and climate change, and then reviewed its portfolio to identify gaps and opportunities. We noted a cross-disciplinary approach to the work, helped by strong leadership from the Ethiopian government and the fact that this is one of DFID's largest and most diverse country portfolios, with investments in climate change, nutrition, civil society, land tenure, insurance, cash transfers, humanitarian aid, and water, sanitation and hygiene. The office champion played an important coordination role, ensuring that these programmes worked together where relevant and avoided duplication.
- 4.16 Uganda offers another positive example of a cross-sectoral approach to resilience. The country office is concentrating its programming into drought-prone areas made more vulnerable by the arrival of more than one million South Sudanese refugees, with programmes supporting both refugees and host communities complemented by health and livelihoods interventions. We discuss this country case study further in the next section.
- 4.17 Across our case studies, the strongest examples are where DFID has taken a problem-solving approach to resilience, looking for opportunities across its development and humanitarian programming to address the most urgent challenges. The variation in the mainstreaming approach between the case study countries reflects different risks and country contexts. This tends to validate DFID's emphasis on allowing flexibility and promoting ownership of the resilience agenda by the country offices.
- 4.18 However, the flexibility given to country offices has also resulted in some gaps and weaknesses in the different approaches adopted by our case study countries. We found that resilience goals were evident in programme documents for the large majority of, or all, programmes in Ethiopia (100%), Nepal (90%) and Uganda (80%). For Bangladesh and Mozambique, only half of the programmes included resilience objectives, while Mozambique was the weakest at demonstrating a coherent approach to resilience across the portfolio. Overall, 75% of the sampled programmes addressed resilience explicitly. Seven out of the 48 country-level programmes we reviewed had in our view missed clear opportunities for mainstreaming resilience. Two of these predated the mainstreaming processes and had not been revised to include resilience, while four were designed during the mainstreaming exercise and one had been designed since it was completed.
- 4.19 Our country case studies were drawn mainly from Tier 1 countries that had voluntarily adopted the mainstreaming agenda. With the exception of the Occupied Palestinian Territories, which focused on conflict risk rather than natural disasters, all of them demonstrated a focus on resilience at both portfolio and programme levels.
- 4.20 As resilience is a cross-cutting objective, rather than a sector, it is not possible to calculate the share of expenditure in any given programme or country portfolio going towards resilience. It is therefore not possible to answer our review question on whether DFID now invests enough funding into resilience. However, it is clear that the level of investment and focus has increased in our case study countries as a result of the mainstreaming process.

DFID's move towards adaptive programming was an important part of the mainstreaming process

- 4.21 The flexibility to respond and adapt to natural disasters can be an important element of resilience in the design of both humanitarian and development aid programmes. In recent years, DFID has moved to build greater adaptability into its programming. We saw evidence of this in our sample, with programmes that have the capacity to scale activities up or down or to reallocate funding in response to shocks and crisis. Box 5 shows how DFID offices in Mozambique and Nepal added flexibility into the design of two resilience programmes. However, this is not yet standard practice across DFID's country offices.

Box 5: Examples of adaptive programming in practice: Mozambique and Nepal

We observed good design practice in the Mozambique El Niño business case, which incorporated a contingency reserve into the programme “to respond to sudden spikes in ongoing emergencies or adjust to new humanitarian needs”. The business case has also built in flexibility to learn and adjust to contextual changes, by determining that “the detailed programming for year two will be developed towards the end of year one, when assessment of prospects for the next harvest will help determine the likely target group that will need further, transitional assistance”.

In Nepal, a new resilience programme showed good practice by creating a comprehensive risk matrix, which articulated a broad basket of risks related to conflict and natural disasters, political commitment, government restructuring, partnership, procurement and internal staff capacity. Mitigation measures were then developed for each risk, including adapting business processes, using flexible funding, strengthening political economy analysis, making better use of influencing opportunities, using monitoring and evaluation contractors flexibly, and drawing on DFID’s surge capacity.

DFID has not done enough to ensure that mainstreaming will be sustained

- 4.22 DFID’s resilience mainstreaming initiative was wound up at the end of 2015. The resilience advisory team was disbanded and the Catalytic Fund closed. DFID took the view that the strategy’s main objectives had been achieved and resilience to natural disasters was now sufficiently embedded across central and country office programmes to be considered ‘business as usual’. An internal paper, *Building resilience beyond 2015*, reaffirming the importance of the agenda and discussing how to maintain momentum, was written but never published. A number of DFID staff told us in interviews that the abrupt end to the mainstreaming exercise gave rise to some concern at that time about whether resilience would remain a departmental priority.
- 4.23 Since then, DFID’s commitment to resilience has been affirmed in other publications, including the 2015 UK aid strategy and DFID’s September 2017 humanitarian reform policy.²⁰ The policy outlines how DFID will continue to strengthen preparedness, improve risk management and make its own programming disaster-resilient, as well as integrating these themes into an ambitious reform agenda for the international humanitarian system.
- 4.24 DFID’s resilience work is now overseen by a cross-departmental round table, chaired by the director of DFID’s Conflict, Humanitarian and Security Department. This round table was apparently established to ensure that resilience continued to be a priority, both for the aid programme and in the UK’s international advocacy work and partnerships. However, the round table is convened irregularly, usually in advance of key events and influencing opportunities such as the World Humanitarian Summit and the Bilateral Development Review, and it does not actively monitor DFID’s resilience work. In interviews, its members expressed the view that greater oversight of programming was not required, given that resilience is now part of DFID’s core business.
- 4.25 We are nonetheless concerned that DFID has not given enough attention to ensuring that its progress to date on mainstreaming resilience through its country portfolios will be sustained. We have found that the flexible and voluntary process was effective at encouraging country offices to engage on resilience, and that the results continue to be visible in the country portfolios that we reviewed. However, it is not sufficient to assume that resilience is now ‘business as usual’ at country level. Country-level risk assessments have not been kept updated and resilience strategies have not been refreshed. We have found some gaps and weaknesses in how resilience is factored into programme design. There is no process for reporting on resilience work at the country portfolio level, or for looking back following a major disaster to assess how the portfolio performed. DFID has not built resilience into its business processes for portfolio planning and programme management, so as to lock in the achievements to date.

²⁰ UK aid: tackling global challenges in the national interest, HM Treasury and DFID, November 2015, [link](#). Saving lives, building resilience, reforming the system: the UK government’s humanitarian reform policy, DFID, 2017, [link](#).

Conclusions on the effectiveness of mainstreaming

- 4.26 Overall, we judge that DFID's approach to mainstreaming resilience within our sampled countries has proved largely successful, meriting a green-amber score. Its voluntary approach, backed by advisory and financial support from the centre, attracted participation from those DFID country programmes that determined resilience to natural disasters to be a priority. The flexible approach left them space to develop solutions that best suited their portfolios and country context. The risk assessments and disaster resilience strategies were light exercises, but acted as a prompt to country offices to develop a resilience narrative that was then incorporated into their country plans and business cases. At the organisational level, country offices appointed office champions and established cross-programme teams, helping to ensure a multidisciplinary approach spanning the traditional humanitarian/development divide.
- 4.27 Resilience was embedded in all of our case study countries, albeit with resilience to conflict understandably prioritised above resilience to natural disasters in the Occupied Palestinian Territories. Nepal, Ethiopia and Uganda stand out as strong examples, with well-considered approaches and a good spread of relevant programming.
- 4.28 However, a time-limited and voluntary approach to mainstreaming is not without risk. While country offices now speak of resilience as part of their core business, the withdrawal of central support and the lack of monitoring or reporting arrangements create a risk that the prioritisation and progress will not be sustained.

Effectiveness: How effectively is DFID supporting the implementation of resilience to natural disasters?

- 4.29 In this section, we assess the quality and effectiveness of DFID's work on resilience to natural disasters, in individual programmes and in portfolios. We divide the programmes into two groups: humanitarian, environmental and climate-related programmes, where the inclusion of resilience to natural disasters objectives is particularly pertinent; and other sectoral programmes in areas such as social protection, health, education and water and sanitation, where there is generally scope to incorporate resilience objectives. We also consider how DFID works with others globally and at country level to strengthen collaboration and promote common approaches, and whether DFID is building sustainable capacity for resilience to natural disasters in partner countries.
- 4.30 We assessed whether DFID's programmes are taking a credible approach to resilience and whether they are on track to deliver results by taking the following steps:
- We reviewed the programme documentation to see whether the programme had considered existing or future risks associated with disasters, and had included activities designed to address them.
 - We examined the logical frameworks to identify outcomes or outputs that could be linked directly or indirectly to strengthening resilience to natural disasters, and we sought to identify indicators or proxy indicators linked to these.²¹
 - We then reviewed documentation from DFID's own monitoring processes, including annual reviews, external evaluations and project completion reports. We conducted interviews with DFID staff and implementers. In Bangladesh, Mozambique and Nepal, we also visited a range of field sites to observe projects and gather feedback from community groups.

DFID's humanitarian support and climate and environment programmes are making a range of useful contributions

- 4.31 Most of the humanitarian, climate and environment programmes we reviewed had explicit objectives around strengthening the ability of individuals, communities or countries to cope with shocks caused by disasters. We were able to trace these objectives through to activities within the programme that appeared appropriate. The humanitarian programmes included a range of activities to prepare for

²¹ Proxy indicators are frequently needed to measure resilience as it is not always directly observable.

timely and efficient disaster response. In climate and environment programmes, the focus was more on anticipating risks in order to reduce their likelihood or mitigate their impact through adaptation activities.

- 4.32 Across the case study countries, we found that all of the humanitarian, climate and environment programmes we sampled rated well for the relevance of their work to resilience objectives. Delivery of outputs was in most instances proceeding as planned, although some programmes in the sample were still at an early stage. In most instances, it was not possible to reach a conclusion on the achievement of resilience-related outcomes, as the data was not available (see the “How well is DFID learning” section below for our analysis of DFID’s monitoring and evaluation). However, the combination of well-designed programmes, conforming to what is considered good practice in the field of resilience programming, and solid delivery of outputs gives some confidence that the programmes are likely to be making useful contributions to building resilience.
- 4.33 For example, in Bangladesh, DFID’s Humanitarian Preparedness and Response programme (£25 million, 2011-17) sought to strengthen the preparedness of the humanitarian system for large-scale, unpredictable disasters such as earthquakes and cyclones and recurrent, predictable disasters such as floods. It has helped the United Nations to prepare for and coordinate disaster response through the provision of coordination staff and the development of a joint needs assessment methodology. The feedback we received from stakeholders suggested that this investment helped strengthen the overall response to the floods that affected large parts of Bangladesh in 2015-16. The programme reports we reviewed showed that it had also helped strengthen the ability of targeted communities to withstand future shocks, by supporting preventative measures such as the construction of cyclone-resilient housing raised above flood levels.
- 4.34 Evidence of the Humanitarian Preparedness and Response programme’s contribution to building the capacity of the Bangladesh authorities to support resilience is more mixed. While we heard positive feedback from the government, the final evaluation suggests that there may have been a level of capacity substitution (doing tasks on behalf of the national government instead of helping it develop its own capacity to do them), which could undermine the sustainability of results. In a follow-on programme (2016-21), DFID is working with the government of Bangladesh in a national resilience programme led by United Nations Development Programme (UNDP). The objective is to strengthen national understanding of disaster risks and to promote investment in disaster risk reduction and resilience.
- 4.35 In Nepal, the humanitarian risk analysis undertaken for DFID’s programme to increase resilience to natural disasters (£22 million, 2011-16) prompted it to focus on earthquake preparedness in the Kathmandu Valley. It supported the capacity of the government and international and national non-governmental organisations to respond swiftly in the event of a major earthquake. Measures included earthquake-proofing several hospitals, stockpiling equipment for use after an earthquake and putting in place mechanisms to ensure continuity of water supplies and other essential services. DFID also funded a humanitarian staging area to improve the speed with which humanitarian goods could be received at Kathmandu airport. This timely investment provided the logistics backbone for the international response to the devastating earthquake in April 2015, just one month after it was completed (see Box 6). We also heard feedback from local communities we visited that the creation of local disaster management committees and training in first aid, search and rescue and other areas had proved valuable when the earthquake hit. As DFID was the only donor undertaking preparedness work in the Kathmandu Valley before the earthquake, these investments proved significant.

Box 6: DFID’s humanitarian staging area reduced bottlenecks in the international response to the Nepal earthquake

The April 2015 Nepal earthquake was a major catastrophe that killed 9,000 people, injured 22,000 and destroyed over 700,000 houses. To help prepare for a disaster of this scale, DFID Nepal invested in a humanitarian staging area at the airport in Kathmandu, which opened just one month before the earthquake. The staging area allowed supplies to be processed much faster. It also provided the logistics backbone for the whole humanitarian operation, with initial coordination meetings hosted from the site.

A review undertaken after the earthquake by the global Logistics Cluster, the multilateral coordination body for humanitarian logistics, found that the facility was not just a physical space to store and transfer relief items, but also a “fixed point in a chaotic setting”. The review concluded that it contributed significantly to reducing delays in the receipt and onwards delivery of relief materials arriving in country and decongesting the airport. Although the preventative results cannot be measured directly, it is likely to have saved a significant number of lives.²²

- 4.36 In Uganda, monitoring data and programme reports suggest that progress is being made towards a range of resilience objectives. For instance, in the north of the country, the Enhancing Resilience in Karamoja programme (£53.8 million, 2013-17), though not uniformly successful, has led to substantial improvements in local government capacity for data gathering and drought early warning systems, as well as the earlier detection and treatment of malnutrition by village health teams and local clinics. As well as monitoring outputs, the programme conducted evaluations to assess how well the different elements of the programme worked together.
- 4.37 DFID is also investing £48.2 million over eight years (2014-22) as part of its Northern Uganda: Transforming the Economy through Climate Smart Agribusiness programme. The programme aims to increase the resilience to climate change of 117,150 beneficiaries and increase the agriculture-related incomes of over 75,000 poor households in northern Uganda. While there have been some delays in starting some components of the programme, monitoring reports show that the resilience of small-scale farmers to climate change has been increased through the use of diversified seed varieties, modified farming practices and improved access to markets.
- 4.38 In Ethiopia, DFID’s Climate High-Level Investment programme is spending £23.8 million over five years to help the government of Ethiopia strengthen the country’s resilience to climate change. Included in this programme is a £2.2 million innovation project supporting new and improved disaster risk management approaches in the agriculture sector, lessons from which are meant to inform national policy and programmes. While DFID and its implementing partner, the UN Food and Agricultural Organization, have faced challenges with measuring overall results, the programme has generated good project-level achievements. For instance, in the Rift Valley, it has invested in an innovative pilot project to strengthen the resilience of local farmers (see Box 7).

Box 7: Progress made in Ethiopia to strengthen resilience to natural disasters of small-scale farmers in the Rift Valley

Under its Climate High-Level Investment programme, DFID funded a range of practical adaptation measures such as the construction of dams and terracing, awareness-raising among farmers on the dangers of deforestation, the provision of drought-resistant seeds to improve harvests, and the diversification of livelihoods (including generating new income streams for women). The project had several outcomes that strengthened resilience to natural disasters, including:

- Embedding of new (potentially scalable) land management practices such as dams and terracing that are sustainable models for mitigating the effects of changing weather patterns.
- More reliable income for farmers, which enabled them to plan their spending better. One effect of this was that their children were more likely to continue to go to school.
- Improved understanding of the role of technology in protecting and improving ecosystems.

22. Nepal Lessons Learned Report, Logistics Cluster, 2015, [link](#).

- 4.39 Our review showed that humanitarian and climate-related programmes that were developed after the resilience mainstreaming had begun tended to be more explicit about how they were seeking to strengthen resilience to natural disasters, and to draw on a stronger evidence base on how to achieve these aims.
- 4.40 Despite the diversity of the programmes, the breadth of approaches taken to improve resilience and the challenges in gathering evidence, the review of our sample gave us reasonable confidence that DFID’s humanitarian, environment and climate programmes were making a positive contribution to building the resilience of individuals, communities and countries to natural hazards and shocks.

Most of DFID’s sectoral programmes include activities that are likely to contribute to resilience

- 4.41 Our sample included a diverse range of sectoral programmes on social protection, health, water and sanitation, education, nutrition, infrastructure and governance. We found that the majority of these programmes included activities that were likely to contribute to reducing disaster risk and strengthening resilience. For example, DFID Nepal’s Health Sector programme (£85 million, 2016-20) is in the process of retrofitting hospitals to make them earthquake-proof. It has undertaken seismic assessments in 59 facilities and completed initial structural surveys in 21.
- 4.42 In Uganda, DFID’s social protection programme contributed to resilience by lifting some of Uganda’s poorest households out of chronic and abject poverty with small and regular cash grants. With this cash, these households have been able to send children to school, acquire more and better food, access health services and treatment, and invest in productive assets. Several evaluations have shown that the combination of these improvements has increased the resilience of families in the event of emergencies.²³ In addition, the DFID staff we interviewed suggested that the cash transfer process itself has improved the resilience of targeted communities as a secondary benefit, as they now have better access to financial services.
- 4.43 DFID’s support for local government has the potential to promote local-level change, as demonstrated in Nepal. DFID’s Community Support programme had an outcome of “improved access by the poor and excluded people, especially women and girls, to community-based development opportunities and enhanced preparation to cope with disaster”. The resilience to natural disasters component was added in April 2012, when £2 million was earmarked for increasing the resilience of vulnerable communities (especially women) to climate change and natural shocks. The project completion review showed that resilience targets were for the most part achieved. It found that the majority of the infrastructure constructed for the programme had been designed to be disaster-resilient. It concluded: “In the last two years, [the programme] has innovated by making infrastructure disaster resilient and by getting communities to be aware, trained and ready to tackle disasters.” These lessons have subsequently been integrated into DFID’s Community Development programme and Local Government Support programme (£68 million, 2013-17).
- 4.44 DFID’s engagement with civil society in Bangladesh also offered a good example of local-level engagement to strengthen resilience. Its five-year, £223 million Strategic Partnership Arrangement with BRAC, a Bangladeshi non-governmental organisation, has strengthened the latter’s awareness of the importance of embedding resilience objectives in its programming (see Box 8 below).

Box 8: DFID’s engagement with BRAC in Bangladesh to strengthen its disaster resilience work

BRAC is an international development organisation, founded and based in Bangladesh, and DFID has worked with over a number of years. One of the current priorities for the partnership with BRAC is to strengthen the resilience components of BRAC programming. DFID’s partnership documents have increasingly used resilience terminology. BRAC’s 2016-20 strategy has a specific focus on climate change and sets as a strategic priority: “building resilience to climate change and developing capacity for emergency response during natural and man-made disasters”.

²³ See, for example: *How can social protection build resilience? Insights from Ethiopia, Kenya and Uganda*, Overseas Development Institute (ODI) and BRACED, 2016, [link](#); and *Evaluation of the Uganda Social Assistance Grants for Empowerment (SAGE) programme: Impact after two years of programme operations 2012-2014*, Oxford Policy Management, 2016, [link](#).

We saw evidence of this strategic prioritisation of resilience on our field trip to villages outside of Chittagong, one of the poorest parts of Bangladesh with high cyclone and flood risks. We observed that the BRAC school provided good teaching on disaster risk and climate change. Our discussions with communities revealed that the disaster management teams were working effectively on issues of early warning and community evacuation. In one of the villages we visited, where BRAC had responded to a cyclone, high-quality and culturally appropriate shelters and latrines had been constructed. Our discussions with community members highlighted how the BRAC programme had reduced the impact of natural disasters through the effective use of community-based disaster response teams to evacuate people to cyclone shelters. This reduced loss of life and injury as well as protected livelihood assets.

Lack of monitoring of resilience results made it difficult to assess the effectiveness of many of the sectoral programmes in our sample

- 4.45 Frequently, the sectoral programmes we reviewed did not measure resilience directly in their logical frameworks or results frameworks, since it was seen as a secondary benefit of the programme. This made it complex to identify and measure the contribution that these programmes made to strengthening resilience to natural disasters. We reviewed programme documentation and triangulated this with interviews with DFID staff and partners. In some cases, direct observation was also possible during field trips. But we were not always able to find solid evidence on programme effectiveness. For instance, in Mozambique, a DFID water and sanitation programme (£38 million, 2015-19) has a strong resilience focus. The business case discusses the need to locate water points and sanitation facilities away from flood-prone areas and to prevent boreholes from failing during drought, as well as the importance of training water-user committees. However, these issues are not addressed in programming reports, making it difficult to assess whether the proposed risk mitigation measures were in fact carried out.
- 4.46 Education programmes offer significant opportunity to strengthen resilience. DFID's Bangladesh Education Development programme (£120 million, 2011-16) provides mixed evidence of this. The programme documents were written before DFID made its commitment to mainstreaming resilience, and the annual reviews do not consider the topic. However, the responsible DFID staff told us that, in the current phase of the programme, DFID is seeking to strengthen disaster risk reduction in schools. It is also working with the Ministry of Primary and Mass Education to clarify policies and practices for education in the event of emergencies. The next phase of the programme, which is currently being designed, will embed disaster risk reduction more firmly in DFID's work on education.

Adopting a portfolio approach to resilience is important, but not always done in practice

- 4.47 In its guidance note on mainstreaming resilience to natural disasters in programmes,²⁴ DFID outlines the importance of using a portfolio approach, strengthening resilience through improving links between programmes: "different programmes within the portfolio address different sectoral issues but a clear understanding of the complementarity of different sectors is acknowledged and each is shown to build a different component of resilience".
- 4.48 Despite this guidance, most countries we reviewed had not articulated a clear strategy of how, at a portfolio level, programmes were jointly contributing to strengthening resilience. For instance, while the business cases of humanitarian and climate-related programmes in Nepal and Bangladesh made links to other sectoral programmes in DFID's portfolio, this did not amount to a clear portfolio approach across all programming sectors.
- 4.49 Uganda and Ethiopia were the only country offices in our sample that had adopted a relatively well-developed portfolio approach. In the Uganda country portfolio, each programme we reviewed demonstrated strategic links with at least one other programme in the portfolio with respect to building resilience. An example is provided by DFID Uganda's response to the arrival of more than one million refugees from South Sudan. In designing the refugee programme, the health and malaria programme team worked with the refugee team to determine how to coordinate interventions.

²⁴ *Embedding Disaster Resilience in Programmes*, guidance note, DFID, 2012, unpublished.

DFID's Northern Uganda: Transforming the Economy through Climate Smart Agribusiness programme is also in the process of redirecting much of its project work to the West Nile region, where agricultural markets offer significant opportunity and value to refugee populations and their hosts. This change also offers potential long-term savings by reducing the scale of emergency response required over time.

At country level, DFID has helped to lead and coordinate the work of other development partners

- 4.50 In the countries we reviewed, we found that DFID has performed an important function in convening donors and development partners on resilience. During our visits to Nepal, Bangladesh and Mozambique, DFID's development partners told us that DFID played a leadership role on issues of resilience, and most actors we interviewed had a strongly positive view of how the UK had used its convening capacity to bring key stakeholders together.
- 4.51 Similarly, in our desk reviews of Uganda and Ethiopia, we found that DFID was seen by other donors as influential, playing a positive role in coordinating donors, establishing formal management mechanisms and setting up technical assistance committees and working groups on resilience.²⁵

DFID works closely with national governments to build sustainable resilience to natural disasters

- 4.52 DFID has responded well to the recommendation from the Humanitarian Emergency Response Review that it should do more to promote national response capacities in at-risk countries. Capacity building aimed at national government departments was a component of almost all the relevant humanitarian, environmental and climate-related programmes we reviewed. In both Bangladesh and Nepal, we noted a shift in DFID's resilience approach over time from a focus on the community level to engaging more strategically with the government (see Box 9). While this is not an easy task, it is a worthwhile one: encouraging national government ownership of disaster resilience strategies is widely regarded as central to achieving sustainable results.

Box 9: Examples of how DFID strengthens government capacity for resilience

Bangladesh: DFID has had mixed results from working directly with the national disaster management authority in Bangladesh. Drawing on lessons from this experience, DFID is working with key ministries through a joint programme, managed by UNDP and UNWOMEN, to strengthen government capacity on resilience. While disaster risk management is a major feature of the government of Bangladesh's seventh five-year plan and a national disaster risk governance system has been established, gaps in its implementation capacity remain.

We interviewed representatives from Bangladesh's Ministry of Disaster Management and Relief, Ministry of Planning and Ministry of Women and Children's Affairs, who are participating in the DFID-sponsored programme. They all endorsed the importance of the cross-ministerial approach and highlighted the significant gaps in knowledge and capacity that currently exist.

Nepal: DFID has a long history of working with the government across its programme portfolio, including significant engagement with the Ministry of Home Affairs, which leads disaster preparedness and response. As a consequence, it is considered by its peers to be an effective partner of the government on issues of disaster management and resilience.

The challenge in Nepal for donors and development partners has been the weak policy framework and the lack of a disaster management bill, which has the potential to undermine progress made. Our interviews with donors and government representatives revealed that DFID is working at different levels of government to strengthen leadership on resilience. At the local level, DFID is strengthening the government's capacity to coordinate climate adaptation plans and disaster preparedness plans. At the central level, DFID has been working with key government ministries to build support for legislation on disaster management and resilience.

²⁵ The Occupied Palestinian Territories, our sixth review country, stands out from the rest: due to its specific context, resilience to natural disasters is a lower priority for national authorities, although DFID has worked with local authorities (for instance through centrally managed programmes) to help build resilience to natural disasters. This means that coordination and national capacity building in the area of resilience to natural disasters is less pertinent in this case.

4.53 Working more closely with the government requires DFID to be politically astute. In Nepal, DFID was praised by a donor group focusing on resilience for the quality of its political analysis and its willingness to share this with trusted partners.

Through its centrally managed programmes, DFID has influenced the global resilience agenda

- 4.54 A key objective of the Catalytic Fund, a centrally managed programme, was to strengthen global uptake of the resilience to natural disasters agenda. We found that DFID has played a significant role in this area. For instance, DFID commissioned the Overseas Development Institute to consider the options for including resilience to natural disasters in the Sustainable Development Goals (SDGs). It produced a range of papers by leading experts, which set out potential resilience indicators and targets. The synthesis paper summarising these recommendations was influential during the preparations for the SDGs.
- 4.55 On the international stage, the Political Champions for Disaster Resilience, a group of politicians and senior UN representatives convened and co-chaired by DFID and the UNDP (which also included representatives from the Caribbean Community, the US government, the World Bank and the European Commission), played an important part in anchoring resilience to natural disasters in the global development agenda. By the time that this group was dissolved in September 2015, DFID had been instrumental in harnessing a commitment to resilience to natural disasters from many of the members. The group provided a high-level platform from which to call on other countries and agencies to do the same.
- 4.56 DFID's leadership of the Political Champions group was less effective at the country level. In our discussions with DFID resilience advisors, country-based DFID staff and external informants, we heard how the group's initiatives in Haiti and Nepal were hampered by the absence of a shared agenda both within the Political Champions group and between the group and national governments. The initiative also required considerable support from DFID's country offices. The selection of Haiti by the Political Champions group as a priority country was ill-advised, since DFID did not have a country office there to provide hands-on support for the process, and there were few longer-term results to show for the group's efforts there.
- 4.57 We found that DFID has played an influential international role in strengthening the evidence base justifying resilience investments, in taking and managing risks with innovative programmes, and in brokering international collaboration in resilience programming. Several interviews with DFID staff and development partners highlighted the catalytic role that DFID has played, which has permitted other donors with a lower risk appetite to engage in resilience programmes. A good example is the impetus that DFID has created around disaster risk insurance (see Box 10). By undertaking the initial research to build the evidence base, and then by taking pilot programmes to scale, DFID has successfully encouraged other donors to participate.

Box 10: The emergence of DFID as a global leader in disaster risk insurance

DFID has become an international leader in the field of disaster risk insurance. Parametric disaster insurance schemes pay out against predicted, rather than actual, losses from natural disasters, to encourage faster, more effective responses. Insurance payments are released at pre-determined trigger points. For example, the onset of drought might trigger payments that allow national authorities to take action before famine sets in. In addition to faster and more reliable funding for emergency response, parametric insurance can also facilitate an earlier start to rehabilitation work.

In its Sovereign Disaster Risk Finance and Insurance Project, DFID has collected evidence on the effectiveness and efficiency of different combinations of insurance instruments to fund disaster losses. It applied this learning to its investment in the Caribbean Catastrophe Risk Insurance Facility. Payments from this facility were triggered by Hurricane Matthew in 2016 and paid to the governments of Haiti, Barbados, Saint Lucia and Saint Vincent within two weeks of the storm.

In 2014, DFID committed £100 million to another parametric insurance programme, African Risk Capacity. It is the first such insurance pool in Africa. By using satellite rainfall estimates and other such measures as triggers for releasing insurance against drought, the scheme enables earlier response to save lives and livelihoods.

In 2017, the UK announced a new partnership with the World Bank and Germany to establish a Centre for Global Disaster Protection in London.²⁶ The centre will provide training and analysis to help developing countries make informed decisions on managing risks. It will bring together financial, scientific and humanitarian experts to provide advice and design innovative financial tools to strengthen disaster planning and resilience.

4.58 DFID has also promoted collaboration between development partners in situations where coordination has traditionally been weak. The focus of DFID's Ready to Respond centrally managed programme was to strengthen preparedness planning within the international humanitarian system. The project's design, which includes joint targets that can only be met if agencies work closely together, has encouraged unprecedented levels of inter-agency cooperation in the field of preparedness. The establishment of working groups to achieve jointly defined common targets has enabled the four UN agencies involved in the project to adopt common approaches in a range of operational areas, such as cash feasibility, supply and logistics, and emergency planning rollout. The working groups have helped overcome communication and coordination obstacles and this has strengthened ownership of the plans by humanitarian country teams. This again has improved the sustainability of the approach.

DFID has strengthened preparedness and risk management in the international system

4.59 DFID has influenced change in the way the international system anticipates, prepares for and responds to natural hazards. Examples of this include the Africa Risk Capacity programme (see Box 10 on disaster risk insurance) and DFID's support for the Index for Risk Management (see Box 11).

Box 11: DFID's support for the Index for Risk Management (INFORM)²⁷

DFID has played a lead role in supporting INFORM, an open-source risk assessment database that aims to develop a common global risk assessment for humanitarian crises and disasters. INFORM helps to identify where and why crises are likely to occur, so that risks can be reduced, people's resilience can be strengthened and disaster preparedness and response can be improved. By doing this, INFORM aims to help reduce the human suffering caused by crises and the negative impact of disasters on sustainable development.

INFORM was used extensively by humanitarian agencies in determining the vulnerability of countries affected by the El Niño weather phenomenon in 2015-16, helping them assess possible impacts and appropriate responses. It is also being used in the Sahel, where the aim of the Emergency Response and Preparedness Group of the regional Inter-Agency Standing Committee is to use the model to help improve cooperation between humanitarian and development actors in managing risk and building resilience across the region.

4.60 Our country visits revealed that DFID is also strengthening risk management and humanitarian coordination through its country-level programmes. For example, in Ethiopia, DFID and its development partners are supporting the government's efforts to put in place a framework of national policies to build effective, integrated national systems for social protection and disaster risk management, which can be used for a range of poverty-targeted services.

^{26.} See *Centre for Global Disaster Protection in London*, DFID blog, [link](#).

^{27.} For more information on INFORM, see [link](#).

4.61 In Mozambique, DFID has supported the UN Resident Coordinator's Office by funding posts for multilateral humanitarian coordination. When the multilateral system failed to respond fast enough, as in the case of the 2015-16 drought caused by El Niño, DFID has pushed ahead with relief efforts, working with international non-governmental organisation partners, to deliver assistance to affected communities even before the government requested international support.

Conclusions on the effectiveness of programme implementation

- 4.62 The majority of the DFID programmes we reviewed are making progress towards their resilience to natural disasters objectives. Humanitarian, environmental and climate-related programmes are consistently contributing to reducing vulnerability and strengthening resilience. Centrally managed programmes such as the Catalytic Fund, the Political Champions group and the Africa Risk Capacity programme have played a transformational role in strengthening the evidence base for resilience investments, in taking and managing risk, and in brokering international collaboration in resilience programming. DFID's initial investment and research has yielded wider uptake by other donors and development partners.
- 4.63 Performance is more variable in other sector programmes. While we found that the majority of the programmes we looked at are contributing to resilience to natural disasters, many do not measure whether or how such contributions take place, since they are not included in the programme's logical framework or results framework. A minority of programmes did not include resilience strengthening activities at all. There is also a need to improve portfolio-level coordination of DFID resilience investments at country level in most of the countries we visited.
- 4.64 We found that DFID has collaborated with others to bolster international engagement on resilience and has played an important role in championing resilience at key forums such as the World Humanitarian Summit in 2016. At country level, DFID is playing a lead role in convening and coordinating the support of other development partners.
- 4.65 DFID recognises the important role of government leadership in sustaining resilience to natural disasters and it has recalibrated its approach in several of the review countries to strengthen its focus on building government capacity.
- 4.66 Based on these conclusions, we have given a green-amber score to the effectiveness of DFID programmes at strengthening resilience to natural disasters.

Learning: How well is DFID learning in its resilience to natural disasters work?

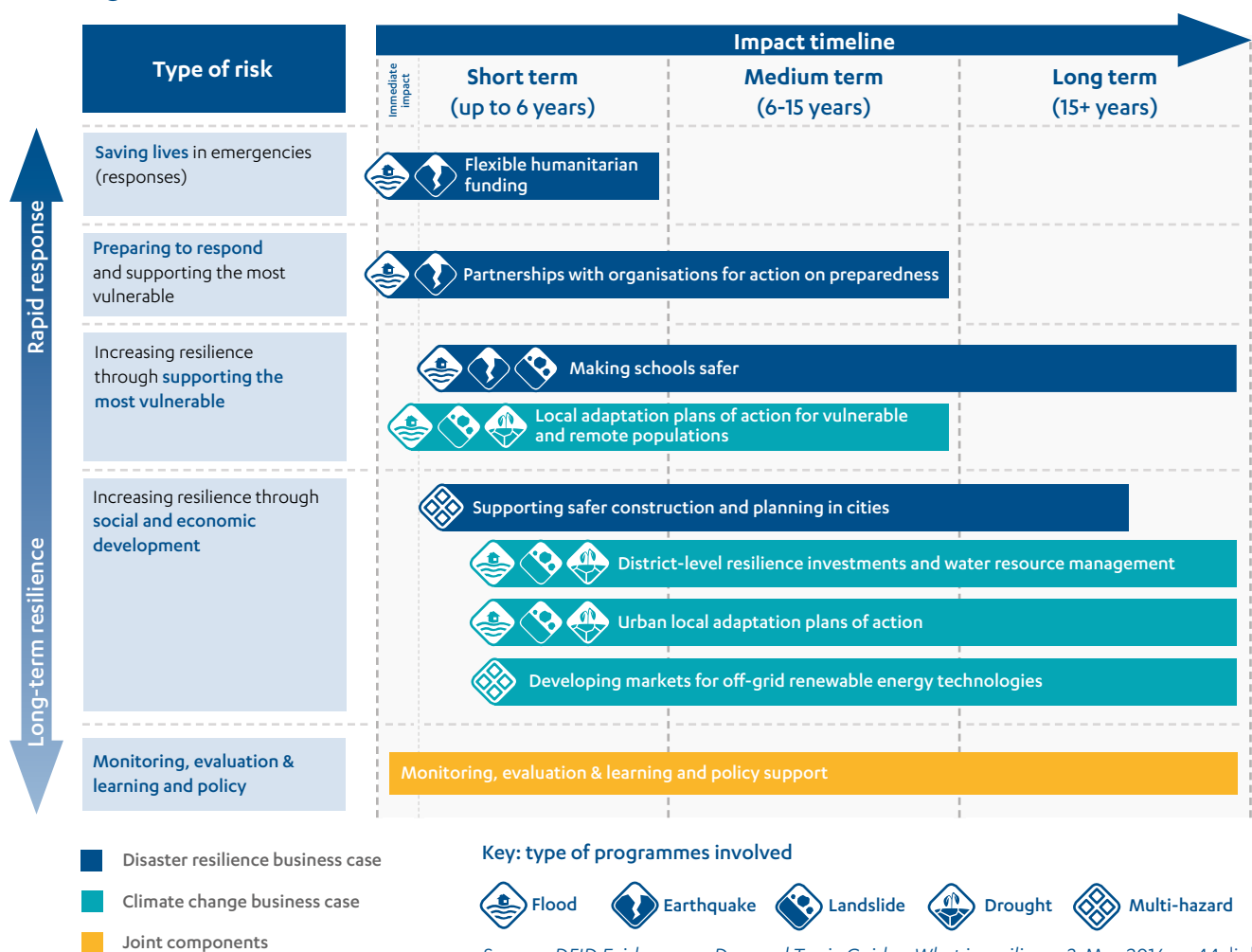
4.67 In this section, we assess DFID's approach to learning from its resilience work and examine how it gathers, synthesises and disseminates this knowledge internally and to others in order to strengthen practice. We look at the approaches that DFID uses to monitor its programmes and measure its results. We also examine the progress that DFID has made in making the value for money case for its investments in resilience.

At country level, learning often occurs within programmes but is less evident across portfolios

- 4.68 Our assessment of DFID's performance in synthesising and using learning, good practice and innovation offered mixed results. Of the humanitarian and climate-related programmes we reviewed, only just over half provided strong evidence of having generated learning and were able to demonstrate that they had used this knowledge to strengthen their programming.
- 4.69 At country level, we found that learning tended to be transferred from individual programmes to their successor programmes (for example from the first to the second BRAC programme in Bangladesh, from the UK Support to Increase Resilience to Natural Disasters in Nepal programme to the Strengthening Disaster Resilience in Nepal programme, and from the floods response to the El Niño response in Mozambique). But there was less evidence of lessons and experience being shared more widely between programmes within country portfolios, or from one DFID country office to another, despite the cross-cutting nature of resilience.

- 4.70 In Mozambique, we found that DFID had not applied transferable learning on resilience to natural disasters across sectoral programmes. As a consequence, there was a lack of synergies and links between programmes. For example, our interviews with DFID partners and our visits to project sites showed that DFID had played an influential role in supporting land-height mapping and modelling of flood risks in the Limpopo Valley as part of a flood reconstruction and climate resilience programme. This data could have been used elsewhere in DFID’s portfolio to identify at-risk locations for planned water, sanitation and hygiene infrastructure investments or for mapping land registration. There was also a missed opportunity to provide risk-mapping tools for agribusiness.
- 4.71 However, in Nepal, we saw good practice in the development of DFID Nepal’s joint humanitarian and climate change business case. This was informed by learning and analysis which cut across DFID’s programme portfolio and which explicitly identified how each intervention could strengthen resilience to natural disasters (see Figure 4).

Figure 4: DFID Nepal’s joint humanitarian and climate change business case: addressing short and long-term resilience needs



Centrally managed programmes have been innovative and have strengthened the evidence base for resilience to natural disasters

- 4.72 The five centrally managed programmes in our sample offered examples of innovation and demonstrated the important role played by pilot programmes as incubators for resilience programmes that have subsequently been brought to scale. A good example of this is the efforts made by DFID to build the evidence base for disaster risk insurance under its Humanitarian Innovation and Evidence programme. One part of this programme, Sovereign Disaster Risk Financing and Insurance (SDRFI), has built a network of experts, industry leaders, institutions and organisations. It

has produced evidence on the impact of SDRFI programmes in a variety of settings, including on ex-ante financing of social protection scalability mechanisms and programmes to increase the capacity of governments to quickly rebuild key public infrastructure following a disaster. The project closed having made significant contributions to the understanding of how to monitor and evaluate existing or potential investments in disaster risk finance from a development perspective. It also contributed significantly to the evidence base on where such investments have development impact.

- 4.73 Our visit to Nepal highlighted the catalytic role played by DFID's Science for Humanitarian Emergencies and Resilience programme in combining high-quality science projects with practical aid delivery programmes, leading to strong development impact on the ground. In the case of Nepal, this combination resulted in much higher quality risk modelling and forecasting data than had previously been available. The use of this data by humanitarian organisations was considered to have significantly strengthened inter-agency preparedness planning.
- 4.74 There was mixed feedback from country offices about the challenges of engaging with centrally managed programmes. In Nepal, we spoke with the Anukulan project team, which forms part of the centrally managed programme BRACED and is delivered by a consortium involving local and international non-governmental organisations and research institutions. The project is delivering impressive results and there are many potential ways in which its experience and learning could be usefully shared with the country office. But because it reports to a centrally located fund manager, rather than to DFID Nepal, coordination has proved difficult and the country office considered this to be a missed opportunity. Feedback from Uganda and Ethiopia on their engagement with the BRACED programme was more positive, with examples given of how learning had been shared between the centrally managed programme and the country offices.
- 4.75 At central level, we found that the heads of DFID's professional cadres (comprising thematic experts and advisors) have played a role in building up staff capacity and competence in the area of resilience to natural disasters by sharing lessons and including resilience in competency frameworks. Some training materials have also been developed and there is an aspiration for these to be used as the foundation for a resilience community of practice. However, staff constraints have meant that this initiative remains at the planning stage.

DFID's review processes frequently fail to capture resilience results

- 4.76 Much of the literature on resilience concentrates on the rationale for work to strengthen resilience to disasters, underpinned by extensive theory about the potential benefits it has in reducing risk and losses. There has been much less progress on measuring the actual results of resilience to natural disasters programmes or how programmes have contributed to changes in resilience. This is also the case for the DFID programmes we reviewed.
- 4.77 Monitoring resilience programmes and measuring resilience results is complicated, and needs different tools than the standard approaches to monitoring outputs and outcomes. In many of DFID's programmes, building resilience is a secondary objective. As a consequence, it is not articulated in logical frameworks or monitored and reported on through DFID's project review processes (annual reviews and project completion reports). This was the case in the Katalyst 3 programme in Bangladesh (see Box 12).

Box 12: A missed opportunity to capture resilience results in the Katalyst 3 programme in Bangladesh

Katalyst is a market systems programme in Bangladesh, in operation since 2002. It aims to increase income levels for poor men and women in rural areas of Bangladesh by increasing the competitiveness of small-scale farming and small enterprises through improving services, inputs and product markets.

In our view, DFID missed an opportunity to build awareness of drought and flood risks into this programme. Better risk awareness would have helped farmers protect their incomes and reduce the harmful impact of natural disasters. The logical framework for the programme contains no specific outputs, outcomes or indicators related to resilience, and the business case outlines no specific resilience targets. Reporting is based on outputs, not outcomes, and so the potential benefits of resilience for improved agricultural income are not explained. There is no explanation of how the programme is disaster risk-proofed.

4.78 Our interviews with DFID and its partners highlighted the difficulties of obtaining reliable and meaningful data on changes in resilience. This challenge was echoed in the 2015 annual report of the BRACED programme. It noted that “an early lesson that can be drawn from this first round of BRACED results is that there are clear limitations to how quantitative results can be used to understand resilience”.²⁸ The report goes on to outline the subjective nature of results and the challenges of collecting and comparing information (“many of the indicators compare apples from one project with oranges from another”).

DFID is exploring ways to strengthen results measurement, but this is still work in progress

4.79 We found examples of programmes that have sought to address the challenge of measuring resilience results through the use of specialist third party monitoring, evaluation and learning contractors. Our review highlighted several examples where this approach led to the adoption of a more rigorous learning approach, where theories of change were translated into monitoring frameworks and resilience results and outcomes were captured and analysed (see Box 13). While many of the DFID programmes that have adopted this approach are at a relatively early stage in their implementation, we found that they are already delivering encouraging results.

Box 13: Strengthening measurement of results through the use of monitoring, evaluation and learning contractors

While our examination of successive annual reviews for DFID Nepal’s Rural Access Programme (RAP) found few indications of how the programme was contributing to strengthening resilience to natural disasters, the introduction of measures to strengthen programme monitoring, evaluation and learning are beginning to change this.

In the most recent, third phase of the programme (RAP3), a dedicated contractor was commissioned to lead on monitoring, evaluation and learning. After a protracted inception phase, the contractor has started to collect data across the outputs, outcomes and impact outlined in the theory of change, in coordination with delivery contractors. This includes collecting evidence on the effect of wage labour on workers’ ability to overcome shocks such as a protracted dry season. By adopting a more rigorous and professional approach to reviewing programme outcomes, DFID has strengthened its ability to better capture, analyse and understand resilience results.

4.80 We also note that DFID’s Climate and Development Department is developing a key performance indicator called KPI4 as a tool for measuring changes in resilience. KPI4 measures the number of people with improved resilience due to a project intervention (see Box 14 for an illustration of how it works). DFID first developed this tool as a means of monitoring results from its International Climate Fund projects, but it can be used for any project for which increased resilience is an objective. It has been adopted as an outcome indicator by DFID’s BRACED programme.

²⁸. BRACED: Annual report 2015, KPMG, 2016, unpublished.

Box 14: Illustration of how KPI4 can be used to measure resilience outcomes

A 2014 DFID guide sets out how Key Performance Indicator 4 (KPI4) can be used in practice, offering examples and case studies.²⁹ KPI4 does not seek to measure a community's absolute level of resilience against shocks and stresses, since this will be affected by external factors that are outside the control of a particular DFID intervention. Instead, the aim is to capture relative changes in resilience that are specifically attributable to a particular project intervention regardless of broader trends.

To be able to do this, the programme's theory of change and programme design must be based on a good understanding of:

- the characteristics and vulnerabilities of the project's beneficiaries
- the sorts of shocks and stresses these beneficiaries may experience
- the likely consequences of these shocks and stresses.

The next step is to engage deeply with beneficiaries to identify the factors that affect their ability to cope with shocks and stresses and to design a project targeted at these factors. Based on this assessment, a set of resilience indicators are developed, directly linked to what the project seeks to achieve.

The resilience indicators are then linked both to project outputs and to intended longer-term outcomes. For instance, if the output is to provide piped water infrastructure, it is not enough to check whether this was done. It is also necessary to check whether it led to a regular and adequate water supply for the beneficiary population, and whether, for example, this led over time to an increase in agricultural activity.

4.81 Initial feedback from the BRACED's fund manager has been equivocal, and concerns have been raised about the complexity of KPI4 and the time and resources required to use it. It has, however, successfully measured changes in resilience and it does offer the potential for wider use. Staff at the Climate and Environment Department in DFID told us that they planned to continue to develop the methodology, which we would endorse.

DFID's centrally managed programmes have generated good-quality evidence in support of the value for money of resilience

4.82 We found broad consensus from development partners that enhancing resilience is likely to provide a return on investment, for example through the protection of assets. However, we also found that applying a value for money approach to resilience is not always easy and some argued that it can encourage too narrow a focus on quantitative results.

4.83 In the 2011 approach paper *Defining Disaster Resilience*, DFID highlighted the need for more comprehensive studies that analyse the cost benefits of resilience and the value for money of different types of interventions at institutional, national and international levels. We found that several of the centrally managed programmes and global learning initiatives we reviewed had made an important contribution to this, by explicitly seeking to strengthen the economic case for humanitarian preparedness, resilience and early response.

Box 15: Examples of DFID research on the value for money of disaster resilience programming

The Economics for Early Response and Resilience research series provides a robust value for money evidence base. The series includes reports from Kenya and Ethiopia, Mozambique and Bangladesh. The most recent report, which investigates the impact of early humanitarian response and resilience building in Turkana in north-east Kenya, was published in August 2017.

²⁹ *Methodology for reporting against KPI4 - number of people whose resilience has been improved as a result of project support*, DFID, 2014, [link](#).

Building Resilience and Managing Risk in Fragile and Conflict-Affected States, funded by the centrally managed Humanitarian Innovation and Evidence programme, uses a similar methodology to assess the economic case for early humanitarian response to the Ethiopia 2015-16 drought. The study estimates that the financial cost of late procurement of food alone was between \$127 and \$271 million. Using an estimated \$90 per person for a nine-month food distribution, these findings suggest that savings from early procurement could have funded food aid to an additional 1.4 to 3 million people.

There is still only partial awareness across DFID of the economic case for resilience

- 4.84 While the economic case for resilience has benefited considerably from evidence gathered by centrally managed programmes, there is only partial awareness of this across DFID more broadly. In our review of DFID's programmes and in our meetings during country visits, we frequently found that staff lacked awareness of relevant knowledge and evidence developed from its resilience activities. As a consequence, DFID is missing opportunities to report the financial benefits of its investment in preparedness and resilience.
- 4.85 Across many of our case study countries, DFID used standard value for money measures or dated return on investment data to justify investment in resilience and preparedness. Only two of the country offices in our sample had undertaken more detailed analyses. As part of the business case for its resilience programme, DFID Ethiopia conducted a rigorous cost-benefit analysis, while DFID Nepal calculated cost-benefit ratios for each component of its disaster resilience and humanitarian response programme. In the latter case, the projected results were subject to a number of sensitivity analyses to account for the potential variation in returns. This is good practice.

Conclusions on learning

- 4.86 DFID has generated a substantial amount of knowledge and learning from its work on resilience, both at country level and from its centrally managed programmes. In the countries that we visited, we found that learning takes place within programmes, but it is rarely shared between them.
- 4.87 While centrally managed resilience-focused programmes are making an important contribution to the value for money case for resilience, there is limited evidence that this learning is being shared and used elsewhere within the department to strengthen programming.
- 4.88 Our findings show that DFID is failing to routinely gather, synthesise and communicate its growing knowledge base on resilience due to a lack of resources. As a consequence, parts of the department are missing out on key opportunities to strengthen their programmes.
- 4.89 We also found challenges in DFID's measurement of resilience results. While outputs are being monitored, resilience-related outcomes are not consistently measured or reported. DFID is taking steps to address this by developing new methodologies to measure changes in resilience, and by contracting out monitoring, evaluation and learning, but progress has been slow.
- 4.90 Six years after the publication of the Humanitarian Emergency Response Review and five years after DFID committed to prioritise resilience and mainstream it across its programmes, significant work remains to be done to be able to adequately evidence the contribution that the department is making to reducing disaster risk and building resilience.
- 4.91 We have given DFID an amber-red score for learning. DFID has made an important contribution to knowledge in this area, particularly in the area of innovation. But its capture of resilience results from country-level programmes, and the dissemination and use of the learning generated by centrally managed programmes, have both been weak. In our view, DFID's results measurement and dissemination practices do not reflect the department's strong prioritisation of resilience to natural disasters.

5 Conclusions & recommendations

Conclusions

- 5.1 Between 2011 and 2015, DFID resourced and implemented a largely successful disaster resilience mainstreaming process. More than two years on from its completion, we found that our sample of programmes are generally contributing to reducing risks and strengthening the capacity of communities to cope with disasters.
- 5.2 But there is room for improvement. DFID needs to strengthen the coherence of its resilience investments by ensuring that they are based on a sound contextual analysis and by adopting a portfolio approach that maximises the potential for each of DFID's programmes to build resilience. There is also a need to strengthen DFID's ability to more rigorously monitor the results of its resilience investments. While DFID has made an important contribution to strengthening the evidence base for resilience, it should also strengthen its ability to synthesise and disseminate its knowledge.
- 5.3 Given the contribution that DFID has made to strengthening international engagement on resilience to natural disasters, it is now well positioned to deliver against its new humanitarian reform strategy to strengthen global risk management and resilience.
- 5.4 We have given DFID an overall green-amber score, reflecting the progress it has made against its resilience commitments. The following recommendations are made so that DFID can continue to build on this progress.

Recommendations

Recommendation 1: In partner countries with significant risks from natural disasters, DFID should keep its risk assessments and resilience strategies up to date, working where possible in conjunction with national governments and other development partners.

Problem statements

- DFID's multi-hazard risk assessments have not been updated or incorporated as a regular part of country office business planning processes. They are not fully 'multi-hazard', in that they list risks but do not explore the interaction between them.
- Without an up-to-date understanding of the evolving context, DFID will be less able to target its resilience to natural disasters work effectively.
- With more governments and development partners engaging on resilience to natural disasters, coordination will be difficult without a shared understanding of risks.

Recommendation 2: DFID offices in high-risk countries should adopt a portfolio approach to resilience, articulating how their efforts in different sectors and areas will work together to build resilience.

Problem statements

- DFID has not kept its country-level resilience strategies up to date. In some cases, the strategy is little more than a short checklist of actions.
- Resilience to natural disasters is best pursued as a cross-sectoral effort, but this requires clarity about how different sectoral programmes can contribute to achieving common objectives.
- Without an up-to-date country-level strategy, DFID is not well placed to identify mutually reinforcing approaches to resilience to natural disasters across its sector programming.

Recommendation 3: DFID should develop its guidance on how to measure resilience results, providing options that can be adopted by country offices according to their specific contexts and needs.

Problem statements

- DFID embarked on the process of mainstreaming resilience across the department more than six years ago, but continues to struggle to measure results.
- Resilience results cannot easily be measured through DFID's standard programme monitoring processes.
- DFID has developed a methodology that can measure changes in resilience, but it has received limited uptake and requires further development.
- DFID should make more use of specialist monitoring, evaluation and learning expertise to more rigorously measure resilience results.

Recommendation 4: DFID should undertake a stocktake of its work on resilience in high-risk countries to assess the contribution of its programming and influencing activity to building resilience and disaster preparedness, to inform its country strategies. This could be done periodically, or following significant natural disasters.

Problem statements

- DFID has not fulfilled its commitment to bi-annual reporting on its progress with mainstreaming resilience to natural disasters. There is currently no consistency in capturing resilience results or sharing learning from resilience programmes across DFID.
- The interdepartmental resilience round table does not track DFID's work on resilience or fulfil its mandate to report on the delivery of resilience commitments.
- The new humanitarian reform strategy re-emphasises DFID's lead role in international initiatives on risk management and resilience.

Recommendation 5: DFID should establish a community of practice to promote the continuing mainstreaming of resilience to natural disasters and provide technical and expert support to the dissemination of knowledge and evidence.

Problem statements

- Responsibilities for advancing different aspects of DFID's resilience agenda are currently split between the Conflict, Humanitarian and Security Department and the Climate and Environment Department.
- While some resilience learning resources have been developed, DFID does not have a central repository of knowledge and technical expertise on resilience to natural disasters. There is an aspiration to initiate a community of practice, but staff constraints have meant that this has not been completed.
- There is evidence that some DFID staff in country offices lack sufficient understanding of resilience approaches to support effective programming.
- Dissemination of learning on resilience to natural disasters between programmes and across sectors is often not taking place.

Annex 1 Detail of scoring



**GREEN/
AMBER**

Question 1: Effectiveness

How well has DFID mainstreamed resilience to natural disasters across its work?

DFID took a flexible, voluntary and phased approach to mainstreaming, encouraging country offices to adapt the resilience agenda to their own priorities and needs. The country offices in our sample took quite different routes towards mainstreaming, with uneven but mainly good results. The country offices were supported by a UK-based team of resilience advisors and resources from a centrally managed Catalytic Fund.

DFID guidelines set out seven steps for mainstreaming resilience. These were applied unevenly. Multi-hazard risk assessments and country disaster resilience strategies were not very detailed, but in most cases established a resilience narrative that was built into country plans and programme designs. All country offices appointed a resilience champion and put together resilience teams with members from both development and humanitarian programming. A planned central monitoring exercise on the mainstreaming process did not take place.

Several programmes had missed opportunities for building resilience. There is also room for improvement in DFID's use of adaptive programme designs, where the practice is not yet consistent.

DFID wrapped up its mainstreaming process in 2015, concluding that resilience had become 'business as usual'. The 2017 humanitarian reform policy confirms the continued centrality of resilience in DFID's aid strategy. However, the withdrawal of central support at the end of the mainstreaming exercise, and the lack of monitoring or reporting arrangements, create a risk that the prioritisation and progress will not be sustained.



**GREEN/
AMBER**

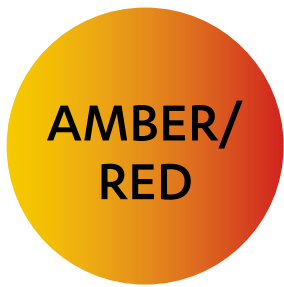
Question 2: Effectiveness

How effectively is DFID supporting the implementation of resilience to natural disasters?

DFID's humanitarian and climate-related programmes have the most explicit resilience objectives and include activities that are likely to contribute to reducing the impact of disasters, strengthen preparedness or increase the resilience of the targeted communities. In other sectors – such as social protection, health, water and education – practice was less consistent. We nonetheless saw a good spread of relevant and useful activities, ranging from earthquake-proofing of hospitals to diversifying livelihoods of vulnerable communities. With some prominent exceptions, notably in Uganda and Ethiopia, most country offices lacked clear strategies for approaching resilience at the portfolio level.

DFID has worked well with national governments and other donors to strengthen capacity and coordination on resilience to natural disasters. Though progress at this level is challenging, we found DFID's capacity building work to be politically informed and well designed, with engagement at multiple levels of government to improve the chances of impact.

At the global level, DFID has done a good job of promoting resilience on the global development agenda, including the Sustainable Development Goals. DFID has become a global leader on parametric insurance (which pays out at the onset of climate-related events such as droughts, to allow early response).

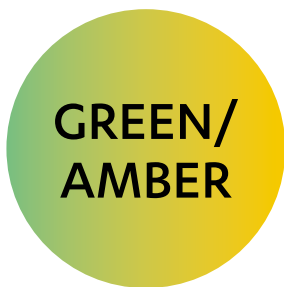


Question 3: Learning

How well is DFID learning in its resilience to natural disasters work?

DFID has generated a substantial amount of knowledge and evidence from its work on resilience, and has used this effectively to promote its disaster resilience agenda in the global arena. But it is failing to routinely gather, synthesise and communicate evidence and learning between its own programmes, and across the department as a whole, in order to improve and develop its resilience programming.

While outputs are being monitored, resilience-related outcomes are not consistently measured or reported. DFID is taking steps to address this by developing new methodologies to measure changes in resilience, and by contracting out monitoring, evaluation and learning, but progress has been slow. In our view, DFID's results measurement practices are not strong enough to support its commitment to resilience to natural disasters.



Overall score

DFID has taken a well-considered approach to mainstreaming resilience, which has resulted in a good level of focus in the countries we reviewed. Its programming has generated some important results, and has the potential to make a significant contribution in a range of areas.

The flexible approach it adopted encouraged country offices to own the resilience agenda and to adapt it to local priorities, notwithstanding some gaps and weaknesses in implementation. However, there is some risk that, with the mainstreaming process now over, progress may not be sustained.

There are also gaps in DFID'S monitoring, at both programme and portfolio level, and in its learning process.

Annex 2 List of centrally managed and country-level programmes sampled for this review

Programme title
Bangladesh
Strategic Partnership Arrangement between DFID and BRAC I
Strategic Partnership Arrangement between DFID and BRAC II
Health Sector Development programme
Climate Change programme - Jolobayoo-O-Jibon
Support to Bangladesh's National Urban Poverty Reduction programme
Strengthening Humanitarian Preparedness and Response in Bangladesh
Bangladesh Humanitarian Preparedness and Response
International Centre for Diarrhoeal Disease Research Bangladesh
Providing Clean Energy to the Rural Poor of Bangladesh
Bangladesh Education Development programme
Katalyst 3
Mozambique
Support to Emergency Preparedness and Rapid Response
Humanitarian Response to El Niño in Mozambique
Social Protection Support
Linking Agribusiness and Nutrition in Mozambique
Lower Limpopo River Valley Flood Reconstruction & Climate Resilience
Mozambique Land Action
Supporting the Transformation of Rural WASH Service Delivery
Support to Climate Change programme through the World Bank
Nepal
Local Governance Support programme
Community Support programme
Rural Access Programme 3
Nepal Health Sector Support programme III
Transition and Recovery of Nepal's Health System
Post-Earthquake Reconstruction programme in Nepal
Rural Water and Sanitation programme - phase five
Strengthening Disaster Resilience in Nepal
UK Support to Increase Resilience to Natural Disasters in Nepal
National Climate Change Support programme
Climate Smart Development for Nepal

Uganda

Enhancing Resilience in Karamoja

Contributing to the Control of Malaria in Uganda

Northern Uganda: Transforming the Economy through Climate Smart Agribusiness

Emergency Refugee Response in Uganda

Expanding Social Protection in Uganda – phase one

Ethiopia

Building Resilience and Adaptation to Climate Extremes

Water, Sanitation and Hygiene (One WASH)

Support to Refugees and Migration

Support to Humanitarian Response Fund

Land Investment for Transformation – Wealth Creation

Productive Safety Net programme – phase 4

Civil Society Support programme – phase 2

Ethiopia Drought Response programme

Building Resilience in Ethiopia

Climate High-level Investment programme

Accelerating Reductions in Under-nutrition in Ethiopia

Occupied Palestinian Territories

Support to Palestinians at Risk of Displacement in Israel

Humanitarian Access in the Occupied Palestinian Territories

Centrally managed programmes

Humanitarian Innovation and Evidence programme

Catalytic Fund

Ready to Respond

Building Resilience and Adaptation to Climate Extremes and Disasters

Africa Risk Capacity

Total: 53 programmes



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