Natural Disaster Risk Reduction

The policy and practice of selected institutional donors

A Tearfund Research Project

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Tearfund’s approach to natural disaster risk reduction

Tearfund is a British Christian relief and development organisation, working with over 400 partners in 80 countries to tackle the causes and effects of poverty.

Since its establishment in 1968, Tearfund has gained considerable experience in disaster management. In recent years, through programme interventions implemented directly by our Disaster Response Team or indirectly through national partners, Tearfund has responded to a variety of man-made and natural disasters including Hurricane Mitch, the Orissa Cyclone, the Gujarat earthquake, flooding in Bangladesh and Mozambique, droughts in Afghanistan, Southern and Eastern Africa, and violent conflict in the Congo, Sierra Leone, Liberia, Southern Sudan and the Balkans.

Tearfund believes that hazards are having an increasing impact on societies as a result of rising levels of human vulnerability. In this respect disasters are not isolated events, but a manifestation of the deficiencies and weaknesses within a society, induced by human-determined paths of development.

Tearfund’s response has been to develop closer linkages between its emergency and development programming through the adoption of an integrated approach to disaster management. This covers a broad range of distinct, yet interrelated activities across all aspects and stages of the disaster cycle. Disaster management interventions are focused on those countries where there is a high probability or likelihood of a disaster occurrence. The primary strategy of vulnerability reduction is to increase the capacities of local communities and organisations to prevent, prepare for, and respond to the impact of disasters. It is a strategy that combines changes effected at the community level with changes to national and international policies and practices.

Tearfund recognises that preventing disasters depends in part upon our ability to build just and equitable social, economic and political structures and processes, and affirms the moral duty of all people (particularly the non-poor) to accept and fulfil their responsibilities to meet the rights and entitlements of the poorer members of our society.

Marcus C Oxley
Disaster Management Director

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1 The expression ‘disaster risk reduction’ is now widely used as a term that encompasses the two aspects of a disaster reduction strategy: ‘mitigation’ and ‘preparedness’. Tearfund defines ‘mitigation’ as the measures that can be undertaken to minimise the destructive and disruptive effects of hazards and thus lessen the magnitude of a disaster. Tearfund defines ‘preparedness’ as all measures undertaken to ensure the readiness and ability of a society to forecast and take precautionary measures in advance of imminent threat, and respond and cope with the effects of a disaster by organising and delivering timely and effective rescue, relief and other post-disaster assistance.

2 Tearfund has undertaken a risk assessment project to identify the 20 countries most at risk from both conflict and natural hazard related disasters. This data is used to identify countries where a greater focus on risk reduction is required.
Preface

In recent years the world has witnessed a significant increase in losses associated with ‘natural’ disasters. The number of people affected by these disasters was three times higher in the 1990s than in the 1970s, and economic losses were five times higher. Disaster-related costs to human life and livelihoods are incalculable.

Both socio-economic and climatic factors are contributing to this upward trend in disaster losses. This trend is expected to continue over the 21st century with increasing levels of vulnerability due to issues such as population expansion, displacement, HIV/AIDS, environmental degradation and global warming. As most human and material losses to disasters occur within the developing world, disasters threaten to undo development gains and prevent the attainment of the Millennium Development Goals. This threat has been increasingly acknowledged by donors and other institutions since the formation of the International Decade for Natural Disaster Reduction (IDNDR) in 1989.

Tearfund is concerned about the frequent disruption of its development programmes by hazards such as floods, droughts, cyclones and earthquakes. It is also concerned that none of its programmes inadvertently enhance vulnerability to extreme hazard forces. Convinced that risk reduction in the form of both preparedness and mitigation is essential to safeguarding these programmes, Tearfund partners undertake risk assessment and risk reduction activities with poor communities in Latin America, Africa and Asia. This work has proved beneficial to communities through increasing their food and water security in times of drought, and their ability to protect their homes and livelihoods in the event of a flood, cyclone or other natural hazard. Consequently, Tearfund is determined to integrate risk management into all its relief and development structures and processes and is undertaking measures to achieve this. Believing that community level risk reduction must be supported by local and national government, Tearfund has also been urging deeper political commitment to the issue, including greater levels of donor investment in disaster prevention with vulnerable countries. We use the word ‘investment’ since we believe risk reduction, within certain contexts, is highly cost-effective in saving money as well as lives. This belief is based on a realistic recognition that years of hard-won development gains can be wiped out by a single preventable disaster.

Although few donors, governments or institutions would verbally deny that disasters pose a global threat to development, the annual growth in the numbers of people affected suggests that insufficient attention is being given to this issue. At the World Summit on Sustainable Development, Tearfund pushed for disaster prevention agreements in the Plan of Implementation. We were pleased these were made, although they lacked time-bound targets. Tearfund’s belief in the need to secure greater commitment to disaster prevention at all levels of society and government has prompted us to analyse how donors are responding to the issue. We acknowledge that some similar analyses have been made and produced within documents such as the World Disasters Reports and the groundbreaking study of NGO Natural Disaster Mitigation and Preparedness.

3 All references to ‘risk reduction’ in the report pertain to natural disaster risk reduction.
4 Produced annually by the International Federation of Red Cross and Red Crescent Societies.
Projects managed by the British Red Cross Society.\textsuperscript{5} Our rationale for undertaking our own research is based on a desire to gain a better first-hand understanding of - in particular - institutional donor\textsuperscript{6} perceptions of the issue, and thereby increase the effectiveness of our efforts to encourage a positive significant change in this area. We offer the findings of our research as a contribution to the ongoing endeavours of all those working to decrease the vulnerability of the poor to disasters.

\textsuperscript{5} Twigg et al. (2000).

\textsuperscript{6} ‘Institutional donors’ include multi- and bi-lateral donor agencies/governments, and international financial institutions. From this point on, they will be referred to as ‘donors’.
Acknowledgements

We would like to acknowledge the much appreciated co-operation of all those who contributed to this research project through verbal and written comment.

We would especially like to thank all those who agreed to be interviewed, for their time, enthusiasm, and for the transparent manner in which they answered our questions.

We are particularly grateful to Professor Ian Davis (Disaster Management Centre, Cranfield University) for his insight, patience and time as consultant to this project.
Executive Summary

Our research revealed that, while greater investment in risk reduction would make economic and moral sense, risk reduction remains a relatively low priority within donors’ relief and development plans, processes and practical implementation. This conclusion emerged from our discussions with donors, (which included an overview of their risk reduction funding levels and staffing allocations - see Appendix 1, Tables 4 and 5).

Donors and experts offered a variety of explanations for why this is the case. The most frequently given was that risk reduction is not ‘mainstreamed’ into donors’ development work. Other explanations for the low priority of risk reduction included:

- Lack of knowledge and understanding of the nature of risk reduction
- The cultural divide between ‘relief’ and ‘development’ sectors, which means that risk reduction is not fully ‘owned’ by either
- Risk reduction ‘competes’ with other pressing development needs.

We have named these three key issues ‘Knowledge’, ‘Ownership’ and ‘Competition’. Our analysis is that these issues are not additional to the problem of lack of mainstreaming, but are symptomatic of it. As illustrated by the Problem Tree on page 9, Key Issues A, B and C are all effects of the primary problem ‘lack of mainstreaming’ (and lack of a ‘preventive culture’). Paradoxically, however, whilst each issue is an effect of the primary problem, it also acts as a barrier to solving it. If risk reduction is to be successfully integrated into development, therefore, it is necessary to break down the barrier that each issue represents. In recognition of this, the report analyses each key issue in turn and provides practical recommendations on how they can be addressed.

Addressing these issues through implementation of the report’s recommendations will help to create a preventive culture in which risk reduction is viewed as a vital and integral aspect of all development work, and is subsequently mainstreamed.

Factors contributing to Key Issue A: Knowledge

* A lack of awareness and understanding of risk reduction
* Its broad scope
* The confusing breadth of terminology used to describe it.

Recommendations:

* Clarify the issue (adopt developmental language)
* Communicate knowledge of the issue within organisations (i.e. between relief and development sectors)
* Emphasise the links between disasters and development
* Disseminate case studies

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7 This commonly used expression implies building risk reduction measures into all development programmes, rather than promoting disaster mitigation and preparedness measures as isolated entities. The rationale for mainstreaming is to protect each development programme from being damaged or destroyed by a future hazard, and also to ensure that development programmes and projects do not inadvertently expand vulnerability.
* Maintain/develop a risk reduction focus (i.e. group of individuals or unit) within an organisation.

**Factors contributing to Key Issue B: Ownership**
* The cultural divide between relief and development communities and sectors
* An erroneous assumption that pro-poor development automatically reduces risk
* The wide range of disciplines that risk reduction encompasses.

**Recommendations:**
* Bridge the intellectual divide – through intra-agency discussion and training
* Incorporate risk reduction into development assistance through policy and strategy level commitment, engagement of development staff and a practical risk reduction ‘checklist’ (the development of a checklist for use by development professionals as piloted by the Inter-American Development Bank (IADB) is a key recommendation of this report)
* Evaluate the effectiveness of risk reduction measures.

**Factors contributing to Key Issue C: Competition**
* Valid and invalid differing priorities as expressed by communities and high-level decision makers.

**Recommendations:**
* Highlight evidence of risk reduction successes through cost-benefit analyses, case studies and evaluations
* Be imaginative – build risk reduction into existing developmental agendas.

The report concludes that without greater investment in, and mainstreaming of, disaster risk reduction, current long-term development efforts will be severely undermined. By contrast, progress on mainstreaming would protect and add value to other sorts of investment in development, and save lives. There is no valid reason why this cannot happen.
Introduction

The number of people affected by natural disasters in poor countries is growing annually. The aim of this research was to determine if and how major donors are seeking to address this through risk reduction (as opposed to post-disaster relief), by assessing their policies and practices in this area.

During the course of February and March 2003, Tearfund held face-to-face meetings (or where this was not feasible, conference calls) with nine key institutional donors to determine:

a) the level of priority they place on disaster risk reduction within their relief and development policy and practice

b) the rationale behind this level of prioritisation.

Our discussions with donors were guided by seven preset questions (see Appendix 1, Box 7). The donors were selected by Tearfund’s Environment and Disasters Cluster group, as representative of a broad range of actors in the field of risk reduction. We recognise that the list is by no means exhaustive.

Table 2 (Appendix 1) provides the names of those we consulted and their position within each donor organisation. As is clear from Table 2, the majority of individuals with whom we spoke were located in the relief sector. We would have liked to interview a greater proportion of individuals working within development divisions, or other departments. However, this proved difficult as we were frequently guided towards relief specialists as appropriate risk reduction contacts. This is indicative of the primary problem identified by the research - lack of mainstreaming.

We recognise, therefore, that our analysis of donor approaches to risk reduction has been largely informed by relief rather than development specialists. However, where we did consult development or policy specialists, we found their assessment of their organisation’s approach to risk reduction to be consistent with that of relief staff. Moreover, the views and comments made by independent experts and other organisations affirm those of relief specialists.

In early 2003, Tearfund also held face-to-face meetings with several other organisations and ‘experts’, in order to learn their opinions on the risk reduction policies and practices of donors and financial institutions (see Appendix 1, Table 3). These opinions have been included in this report along with those of institutional donors.

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8 Represented by Sarah La Trobe (Environment and Disasters Public Policy officer) and Paul Venton (Disaster Mitigation and Preparedness Officer).
9 This is composed of staff from Tearfund’s regional teams and Advocacy Group. Its focus is on natural disaster risk reduction: programmes, developments in the field and advocacy issues both internal and external.
10 We regret that our efforts to meet with the Pan American Health Organisation, the Australian government and Ireland Aid proved unsuccessful.
The research was not specifically concerned with the development and implementation of risk reduction measures by Southern governments or NGOs. However, as an interesting complement to this report, some comments made by officials in the disaster-prone countries of Bangladesh, India, Honduras and Malawi, on their governments’ approach to risk reduction, have been included (see Appendix 2).

In order to maintain accuracy in representing the views of donors and others, each of our contacts was offered the chance to check and edit all relevant comments and statements pertaining to them or their organisation following our meeting/conference call with them. We permitted edits where contacts believed we had misrepresented their views or made factual errors. However, we did not accept edits that significantly changed the original meaning of comments or statements (where this occurred we informed our contacts).

The majority of donors with whom we met expressed conviction that disaster prevention measures are an essential safeguard to development. Kreimer (Disaster Management Facility (DMF), World Bank) observed: ‘If we are in the business of reducing poverty ... one of the mechanisms for this is reducing risk.’ Most donors also expressed belief that risk reduction is a cost-effective intervention in – at the very least – those countries most vulnerable to disasters. Borns’ (Office of Foreign Disaster Assistance (OFDA), USAID) observation was representative of many: although the cost-effectiveness of disaster mitigation and preparedness cannot be proved, ‘There’s no doubt in our minds that spending money now on good mitigation and preparedness activities more than pays off.’

Despite such convictions, however, institutional donors award disaster risk reduction a relatively low priority within their relief and development policy and practice – primarily because risk reduction is not ‘mainstreamed’.

This report assesses the key issues acting as both effects of, and barriers to, this primary problem. It begins with an analysis of ‘Lack of Preventive Culture’ and progresses to examine Key Issue A: Knowledge, B: Ownership and C: Competition (see Problem Tree on page 9). For each of these we present practical recommendations for action. During our discussions with donors we were given several examples of good practice and successes in the field of risk reduction and mainstreaming. We have incorporated these examples into the report through presenting them in shaded boxes.

The recommendations within this report are primarily aimed at institutional donors. However, they can be usefully implemented by all organisations working to reduce disaster risks. This includes NGOs, which have a responsibility to assess their practice in this area and ensure they adequately address disaster risk. As outlined in Tearfund’s Approach to Natural Disaster Risk Reduction and the Preface, Tearfund is currently working to ensure that its relief assistance becomes more ‘developmental’ in nature, and risk reduction is more thoroughly integrated into its development interventions. This includes moves to develop a ‘checklist’ to aid our development specialists in their assessment and analysis of disaster risks.
This Problem Tree illustrates how we believe the issues and problems raised by donors are linked to the primary problem, lack of mainstreaming, and to each other.

**Figure 1 - Problem Tree**

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Primary Problem
LACK OF
‘MAINSTREAMING’

Lack of Incentive to Reduce Disaster Risk (Preventive Culture)

Key Issue A
Knowledge
- Awareness and understanding
- Scope
- Terminology

Key Issue B
Ownership
- Cultural divide
- Assumption that development reduces risk
- Range of disciplines

Key Issue C
Competition
- Other community priorities
- Other high-level agendas
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Preventive Culture

It is hard to find institutions willing to say, ‘Let’s invest now for deferred benefits later to prevent something that may not happen.’ Jeggle (independent consultant)

Jeggle pinpoints a major economic and political dilemma contributing to the global insufficiency of positive risk reduction action. The hesitation to which Jeggle refers is a persistent enemy of the ongoing endeavour to create a preventive culture in which risk reduction is ‘normalised’ or accepted as a fact of life. In the words of Ressler (United Nations Children’s Fund (UNICEF)), we should be saying to governments and others:

You need to do much more than you are doing to reduce risks. Why should any children look like this if they are malnourished, or crushed, or flooded? We should be saying ‘Why? How can you accept this?’

Yet the number of people affected by disasters continues to rise and the attitude of many towards such events remains one of detachment and resigned despondency.

Evidence of a lack of a preventive culture can be found in countries of low, medium and high human development. Donors and governments appear to succumb to a sense of the inevitability of extreme events, and so adopt an apathetic approach to reducing disaster risks. For instance, following the floods of 2002 in central Europe, the EU re-established the Solidarity Fund – a reserve of 1 billion Euros only to be used after a disaster event has occurred. Jeggle observes this is tantamount to saying, ‘These resources and assets are not worth our attention until after they are lost, and then we will spend 1 billion Euros to help the communities and the countries recover.’

Even when hazard events are forecasted, as in the Mozambique flood disaster of 2000, responses may still be apathetic. According to Jeggle, about six months before the Mozambique floods occurred, the meteorological authority indicated that the country was likely to experience heavier than usual rainfall. Mozambique put out an appeal to the international community for US$2.7 million worth of anticipatory measures. However, it received less than half this amount. Once the floods eventually materialised, Mozambique received US$100 million in emergency assistance. Then, at a subsequent conference, a further US$450 million was pledged by the international donor community for rehabilitation costs.

In endeavouring to create a culture of prevention much has already been accomplished in the form of theoretical and scientific advancement, in-depth studies and reports on best practice. Furthermore, in some societies that are subject to a battering from continual disaster events, such as Bangladesh, immense progress has been made in the past two decades in the development of drought, cyclone and flood warning systems, the building of cyclone shelters and highly effective community based evacuation planning. However, a common view held by donors is that there is still a pressing need to move disaster risk reduction out of the realms of rhetoric and theory and into more practical

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11 The ten years of the International Decade for Natural Disaster Reduction were instrumental in creating greater recognition within governments of hazard-prone countries of their obligation to protect their citizens and assets from hazard impact.
dimensions on the lines of the Bangladeshi experience. Schaar (Humanitarian Affairs and Conflict Division, Swedish International Development Agency (SIDA)) stated, ‘Many of us in our rhetoric talk about this, but in practice I think very little is done in terms of integrating these issues into development planning.’

Integrating risk reduction into development planning is key to creating a culture of prevention. Risk reduction, by name at least, is usually undertaken by relief departments within agencies whose primary concern is with managing disasters. Consequently, their natural focus is on the ‘preparedness’ (or ‘preparing to respond’) aspect of the subject more than the purposefully preventive ‘mitigation’ aspect. This raises a further problem as highlighted by Pisano (International Strategy for Disaster Reduction (ISDR)), that risk reduction is merely ‘... the study of the last disaster’. He continued, ‘If we rely on this, I am afraid we will have to kill half the world’s population before we put sizeable prevention in place.’

Clearly, much more needs to be done if ‘sizeable prevention’ is to be achieved, so as to cut the unacceptably high death toll, and destruction of lives and property caused by disasters. Consequently, this report explains how the interlinked key issues of ‘knowledge’, ‘ownership’ and ‘competition’ are hindering the creation of a preventive culture among donors, and its recommendations are underpinned by the need for all those in a position to reduce risks (governments, NGOs, etc as well as donors) to adopt a more practical outlook. Ramón (European Commission Humanitarian Office Disaster Preparedness (DIPECHO)) stated:

Lots of people talk about [disaster risk reduction] but there is nothing concrete. No one is saying this is what I suggest for this type of situation ... We need practical solutions that are not too expensive and are appropriate for communities.

Faced with serious levels of disaster risk, the IADB, in its March 2002 Action Plan, emphasised the need to build a culture of prevention as well as reduce the vulnerability of the poor, and mainstream risk reduction in all Bank operations. Such an approach is not unusual and is echoed in many other institutions and organisations. It is argued in this report, however, that the method adopted by the IADB, with its development of a practical checklist to aid development professionals in their assessment, analysis and subsequent reduction of risks, is a positive contribution to disaster risk reduction as it may help bridge the gap between rhetoric and practice.

It would of course be easy to criticise the IADB’s method of expanding a preventive culture with cries of over-simplicity, lack of contextual analysis and an overly aggressive or unrealistic imposition on development sectors. However, against the reality of rapidly increasing community vulnerability to natural disasters, and following discussions with several institutions and risk reduction experts, we believe that the urgency of the problem requires rapid and concrete action to change institutional responses, even if the checklist approach may be open to improvement.

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12 Facing the Challenge of Natural Disasters in Latin America and the Caribbean, produced by the IADB’s Sustainable Development Department.
Key Issue A: Knowledge

The disaster risk reduction community has only been marginally successful in creating a wider, proper understanding of what disaster risk reduction really entails. (Jeggle)

The research highlighted that a major cause of the failure to mainstream disaster risk reduction into development plans, processes and ultimately to implementation is a lack of knowledge of what it is and how to do it. Three main factors contributing to this are a lack of awareness and understanding of the issue, its broad scope, and the confusing breadth of rather obscure terminology used to describe it.

1. Awareness and Understanding

Several donors stressed that the development sectors of their organisations lack awareness of what risk reduction entails (both conceptually and practically) and consequently fail to integrate it into their work. Kreimer believes that ‘lack of awareness’ is one of three main obstacles to the mainstreaming of risk reduction, and that there is a need to address this within the World Bank. Similarly, Schaar asserted that mainstreaming within SIDA is hampered by the organisation’s lack of a common understanding of the nature of risk reduction. Billing (European Commission Humanitarian Office (ECHO)) informed us that, despite the links the issue has with environmental management for instance, this is a new area for the geographical specialists within DG Development and thus they are less ‘open’ to it as an issue. The need for awareness raising within the EU was also acknowledged by the India Desk within DG RELEX. Finally, Haghebaert (ProVention Consortium) believes two major barriers to mainstreaming are a lack of awareness of risk reduction and a lack of practical ‘tools’ to assist with its implementation. Interestingly, a practical tool could in itself (particularly if supported by a specialist unit or individual with expertise) contribute to an increase in awareness and understanding.

One barrier to an increase in awareness and understanding is the fact that most organisations suffer from a lack of communication between sectors and departments. The risk reduction specialists interviewed for this research frequently worked in humanitarian aid departments. In many cases their expertise and knowledge of the subject (due perhaps to work load pressures) appeared to be confined to their immediate sphere of influence and was not shared with development departments as a matter of course. The research interviewees not only informed us that this was the case, but also demonstrated it through their frequent inability to provide us with the names of development specialists or departments with which they meet to discuss the issue, or even those that purposefully integrate risk reduction into their programming. This failure to communicate contributes to and perpetuates the development sector’s lack of understanding of risk reduction.

13 The other two are a lack of resources and a restrictive time-frame.
Box 1 - USAID

According to Butler (Office of Policy Planning, USAID), USAID does not suffer from a lack of knowledge of what disaster risk reduction is and how it should be undertaken. She stated, ‘I haven’t seen a need to write up a policy to raise awareness.’ She maintains that the organisation has learnt lessons from responding to Hurricane Mitch, and has successfully ‘transferred’ these lessons. She also stated that the Bureau for Democracy, Conflict and Humanitarian Affairs had expended a significant amount of time working on context specific famine preparedness, which had contributed to a good corporate understanding of risk reduction.

2. Scope

Another factor contributing to the lack of knowledge of, and confusion over, disaster risk reduction is that it is very broad in its scope (Aysan of the United Nations Development Programme (UNDP) referred to it as ‘nebulous’). This point is echoed in the British Red Cross study NGO Natural Disaster Mitigation and Preparedness Projects. Another reason for [disaster risk reduction’s] marginalisation is surely the wide-ranging scope of disaster mitigation and preparedness activities (ranging across scientific, engineering, environmental, development and health sectors) and the consequently great variety of agencies working in this field (universities, research institutes, NGOs, international agencies, commercial firms and government departments). It is for this reason that disaster preparedness has been dubbed a bureaucrat’s nightmare. Everybody in the humanitarian aid community recognises the importance of the subject, but pinning it down, and fitting it neatly into a set of coherent policy programmes is quite another matter.

The ISDR believes that this is an ongoing problem: ‘There is still a lot of misunderstanding of the scope of the issue.’ Several donors also raised it as an area of concern. They observed that while their organisations may be undertaking disaster risk reduction, lack of clarity regarding identification prevents it from being reported on. Billing observed that for ECHO to calculate how much it spends on disaster risk reduction it must firstly understand what it is, what it isn’t, or where you “draw the line” on it. He believes this is difficult, and as a result ECHO is spending more on disaster risk reduction than is being reported. The European Parliament has decided ECHO must spend 15–20 per cent of its budget on disaster preparedness, but Billing believes the achievement of this target ‘depends on what we are defining as disaster prevention’. The ISDR also commented on this problem, observing that many investments made on environmental/ developmental policies ‘are not recognised as disaster risk reduction but in fact are’.

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14 Twigg et al. (2000).
15 Referred to in ECHO as ‘disaster preparedness and prevention’ (DPP)
3. Terminology

Another factor contributing to a ‘lack of knowledge’ is the confusing breadth of terminology used by the disaster management community to describe risk reduction. Ramón commented on this, claiming that ECHO discusses disaster prevention and preparedness more frequently now but has been undertaking it for years. She stated, ‘It’s a question of identifying and agreeing on the terminology.’ The ISDR also asserted that there is a need to clarify the concept of disaster prevention so that the issue can be worked on more effectively.

Holzmann\textsuperscript{16} discusses the need to define concepts of vulnerability and hence risk. He asserts that ‘in its simplest form’ vulnerability for an individual or household can be measured using the formula:

\[
V_{ht} = Pr(C_{ht+1} < c) \geq Pr
\]

where, \( t = \text{time}, C_{ht} = \text{per capita consumption expenditure}, c = \text{the poverty line}, V = \text{vulnerability}, Pr = \text{probability threshold}.\)

While the contribution made by the scientific community has been substantial, and has significantly reduced the scale of disaster losses\textsuperscript{17}, the use of such complex mathematical formulas to understand risk and vulnerability could also be seen as a constraint to the adoption by development specialists of practical measures to reduce risks in the field.

\textsuperscript{16} In Risk and Vulnerability: the forward looking role of social protection in a globalising world, World Bank (2001).

\textsuperscript{17} For instance, through significant advances in the understanding of earthquake resistant building types and subsequent building codes
Recommendations

1. Clarify the issue

Disaster risk reduction specialists conversant with the issue and responsible for promoting it within their organisation should seek to adopt developmental language. (See Recommendation 1 of Key Issue B: ‘Ownership’.)

It may be useful to simplify Holzmann’s formula to $\text{Disaster} = \frac{\text{Hazard} \times \text{Vulnerability}}{\text{Capacity}}$

This formula usefully incorporates the four key variables that are needed to understand the nature and scope of disaster risk assessment and risk reduction: ‘disaster’, ‘hazard’, ‘vulnerability’ and ‘capacity’.

2. Communicate knowledge

Those with a sound understanding of the concept of vulnerability and the outworking of risk reduction in the field (often those placed within the humanitarian aid sector) have an obligation to communicate this to relevant development sectors. Communication can be through face-to-face meetings, seminars, or the facilitation of round tables or conferences to discuss the concept, application and integration of disaster risk reduction. This should be both within a donor’s headquarters and in the field (the IADB, for example, is facilitating dialogues with representatives from the Latin America and Caribbean region. The topic of its March 2003 dialogue was local level risk management). One of our contacts within the Conflict and Humanitarian Affairs Department (CHAD) of the UK Government’s Department for International Development (DFID) observed that ‘How To…’ guidelines on risk reduction could assist development desks drawing up Country Strategy Papers.

Box 2 - Canadian International Development Agency (CIDA)

CIDA’s International Humanitarian Assistance (IHA) division has adopted a focused approach and ‘started small’ with the task of knowledge sharing. It has begun working with CIDA’s Climate Change Working Group and the geographical programmes that are already interested in, or working on, disaster prevention. From this starting point it will then try to broaden awareness more generally by taking advantage of other networks within the organisation. By tapping into these networks, Gander (CIDA consultant) stated, ‘we are starting to get the message out’.
Box 3 - Swedish International Development Agency (SIDA)

SIDA’s humanitarian sector is organising a ‘cross-cutting internal project’ on disaster risk reduction. SIDA departments will be invited to examine departmental experiences in the field of disaster risk reduction with the aim of producing guidelines on how it should be addressed. This is a practical way of ensuring that an organisation has – or develops – a consistent corporate understanding of the issue.

Donors working on the issue also need to communicate outside institutional boundaries. One of our contacts within DFID-CHAD asserted, ‘Learning from good practice in other agencies and seeing how they have managed to effectively incorporate risk reduction into their work can be extremely helpful when tackling it within our own organisations.’

3. Emphasise the links between disasters and development

Peppiatt (ProVention Consortium) asserts that the traditional disaster management ‘model’ can be unhelpful as it fails to include the underlying causes of disasters that construct risk and vulnerability. Picking up on this, Aysan argues that the wider development community should get involved in disaster risk reduction ‘... because we’re talking about root causes, not just how to tackle the disaster when it happens’. Therefore, to overcome what Haghebaert describes as a lack of ‘overall vision’ of the issue within organisations, emphasis should be placed on highlighting the root causes of disasters such as poverty and other forms of vulnerability. A useful model illustrating this concept is the ‘Disaster Crunch Model’. 18

4. Disseminate case studies

Donors and experts frequently commented on the lack of disaster risk reduction documentation. Well-documented case studies, although context specific, would prove useful in demonstrating to development sectors both what is meant by disaster risk reduction and how it can be implemented. 19 Internal forums could be established to assess case studies, agree lessons learnt through them and decide actions to be taken to ensure these lessons are incorporated into, or change, institutional practice.

Pilot projects can be undertaken to raise the profile of disaster risk reduction interventions and to develop ‘best practice’ case studies. However, care must be taken to ensure that such projects do not become the overriding focus of attention. This could result in a scenario where projects, like a Formula One racing car, are predominantly showcasing the apparent brilliance of the organisation responsible but do not bear much resemblance to its average programme of work. For instance, in IHA’s evaluation of its disaster preparedness work 20 Gander observed:

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19 The IFRC World Disasters Report 2002 is one recent example of a source of relevant case studies.
20 Towards a New Disaster Risk Management Approach for CIDA (2002).
Under the Disaster Preparedness Strategy, IHA supported a series of small, disparate projects implemented by different partners in disperse regions of the world. While these isolated projects benefited the individuals and communities who were directly involved, most did not have a multiplier effect or aggregate impact. The overall impact of IHA’s disaster preparedness program was not greater than the sum of its parts.

NGOs may be in a position, and should be encouraged financially, to develop and widely disseminate a broad selection of case studies from their experiences in the field. These may usefully include both positive and negative lessons they have learnt.

5. Maintain/ develop a risk reduction focus

Although risk reduction should not and cannot stand alone if it is to be effective, a separate disaster risk reduction unit or dedicated individual/s could be useful in piloting projects, developing case studies and training materials and ensuring the dissemination of these throughout an organisation. (This could include driving the process of learning positive and negative lessons from case studies.) Following the World Bank’s creation of the DMF, the IADB is considering establishing a small disaster risk reduction unit. ‘[It] would be a window out, to see new ideas ... providing best practice documents and training.’
**Key Issue B: Ownership**

Every good idea needs a ‘home’, where it will belong and be nurtured.  
(David Oakley, Disaster Management Training Workshop in Oxford Polytechnic, 1985)

The research revealed that a key issue contributing to lack of a preventive culture is one of ownership. Neither relief nor development sectors within donor agencies fully ‘own’ risk reduction as their specific responsibility and, consequently, the issue falls in the gap between relief and development processes. There appear to be three main factors contributing to a lack of ownership: the cultural divide between relief and development communities and sectors (see Table 1), an erroneous assumption that pro-poor development automatically reduces risk, and the wide range of disciplines that risk reduction encompasses.

### 1. The Relief-Development Cultural Divide

In our research we became aware of the complex and subtle distinctions between relief and development communities and sectors. These can be summarised as follows:

<table>
<thead>
<tr>
<th></th>
<th>RELIEF</th>
<th>DEVELOPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time-frame</strong></td>
<td>Short term</td>
<td>Long term</td>
</tr>
<tr>
<td><strong>Attitudes</strong></td>
<td>‘Welfare’ approach, paternalistic ethos, high level of dependency; underlying concepts – mercy and compassion</td>
<td>‘Support’ approach, self-sufficiency ethos, empowering; underlying concepts – justice and human rights</td>
</tr>
<tr>
<td><strong>Level of support</strong></td>
<td>Public support, political support, media focus, well funded</td>
<td>Intermittent or erratic levels of public, political and media interest and support, poorly funded</td>
</tr>
</tbody>
</table>

An observation is made within the British Red Cross study NGO Natural Disaster Mitigation and Preparedness Projects\(^{21}\) that on the whole ‘development and emergency funders each see [disaster risk reduction] primarily as the responsibility of the other, [and therefore] it has remained an area of marginal concern to both parties’. The study asserts that this is due in part to ‘entrenched attitudes and institutional separatism’. Our research has revealed that, despite some progress, the situation to which the British Red Cross study refers remains an ongoing problem.

Looking at the subject from the relief sector perspective, where there is already some sense of ownership of it, donors are faced with a paradox. Many of the concepts

\(^{21}\)Twigg et al. (2000).
associated with the design and delivery of projects that endeavour to reduce the level of risk faced by vulnerable communities demand a developmental approach and mindset over a period of time far longer than the average relief intervention. For example, Billing observed that ‘disaster preparedness’ should be implemented over a two- to five-year period. However, ECHO, whilst responsible for such interventions, typically has a much shorter funding window geared towards emergency relief and rehabilitation. Von Däniken and Fankhauser (Humanitarian Aid, Swiss Agency for Development and Cooperation (SDC)) made a similar observation: the SDC’s Humanitarian Aid department has the mandate within the SDC to be the implementing agency for disaster risk reduction, but it cannot provide the long-term approach that preventive action requires.

Furthermore, despite an acceptance of the need to reduce disaster risk, humanitarian aid departments are clearly focused on response and rehabilitation in the aftermath of a disaster (See Key Issue C: Competition). There are therefore several examples of risk reduction being built in to post-disaster activities, drawing on the dramatic opportunity and funding provided by the disaster to address underlying vulnerabilities. However, such action can only be a very small contribution to the overall risk status of a vulnerable country or situation and often is only geared to enhancing the disaster preparedness of organisations and communities. Moreover, the disaster itself may have increased the poverty of affected communities, and hence those implementing post-disaster activities could have an uphill battle assisting to rebuild capacities to pre-disaster levels, let alone go beyond this to support measures aimed at decreasing vulnerability to future shocks. Therefore, despite the efforts of the Red Cross Code of Conduct and the principles embedded in the SPHERE Project, conceptually and practically, risk reduction does not sit comfortably with the disaster relief community.

Consequently there is a general acceptance within the disaster management community of the need to increase the level of ownership of risk reduction among development sectors - arguably in a stronger position to reduce disaster risk on a global scale. As Schaar stated:

This is an area that has to be cross-cutting. You can only address these issues, in a meaningful way, through the integration of risk reduction in general development programming and planning.

However, as with relief sectors, risk reduction does not sit particularly comfortably with development sectors, as development specialists often do not perceive disasters as their remit. There still appears to be an ethos that disasters are an unfortunate detour on the developmental path, and as such it is rare for a link to be drawn between the failings of development and the realisation of inherent underlying risks represented in the form of a disaster. As Schaar informed us, his development colleagues do not view disaster crises as integral to their arena of work but ‘a kind of anomaly’ to it.

The research confirmed the widely-held view that there is a much weaker sense of ownership of risk reduction among the development community than among the relief community. This is not to deny that donors and other institutions are increasingly recognising the links between disasters and development. For example, Aysan informed us that in 1997 the UN transferred responsibility for disaster mitigation from the Office for the Co-ordination of Humanitarian Affairs (OCHA) to the UNDP in recognition that mitigation is ‘closer’ to development than relief. Nevertheless, there is still a long
way to go before the issue is fully adopted by the development community. In the meantime, whilst the vast majority of purposeful and targeted risk reduction initiatives appear to be generated from a handful of enthusiastic people within humanitarian aid departments, the cultural divide between relief and development is a persistent barrier to the acceptance of ideas, concepts and the implementation of best working practice outside of the humanitarian aid arena. This was highlighted in IHA’s evaluation of its disaster preparedness work: 22 ‘Many CIDA officers tend to equate “disaster management” with “disaster preparedness” or “disaster response”, and assume that is the mandate of the [International Humanitarian Assistance] Division.’

Box 4 - SIDA

With reference to SIDA Schaar states:

It is hard to think of developmental interventions that are disaster risk reduction orientated. In Central America SIDA is currently concluding some rehabilitation and reconstruction programmes following Hurricane Mitch. These are supposed to have a risk reduction element. Despite this, a recent evaluation has concluded that relatively little was spent on the issue.

Schaar believes that this is due to the persistent divide that exists between relief and development cultures. In order to address the problem SIDA’s humanitarian sector is planning an internal project in 2004, involving several departments, with the aim of establishing a policy and guidelines on how to address risk reduction (see Key Issue A: ‘Knowledge’).

2. Assumption that Development Reduces Risk

Another barrier to the ownership of risk reduction is a perception that pro-poor development work by its very nature reduces the risk of disaster, and hence the entire development community already owns the problem. One of our contacts within DFID-CHAD expressed this:

The poor tend to be the most vulnerable members of society - hence they are often worst affected by disasters. Therefore, if your development brief is really pro-poor, and you are really tackling the root causes of poverty through your work, then surely you are reducing people’s exposure to disaster risk. DFID’s work uses a sustainable livelihoods approach, for example, and through it addresses many of these underlying causes.

There is logic in this argument but there are also significant dangers. Firstly, some key mitigation requirements are not naturally related to livelihood protection. For example, making dwellings safe against hazard impact may not have a direct impact on livelihoods, but this does not negate the strategic life-preserving importance of such actions.

22 Towards a New Disaster Risk Management Approach for CIDA (2002).
Secondly, the ‘pro-poor development’ approach can play down the importance of specific actions that are needed to reduce disaster risks. For example, every community facing the impact of cyclonic storms needs an effective early warning system. Also, every child being educated in a seismically active area needs to be taught basic seismic preparedness measures (in a school that has been made safe against the impact of earthquake forces). The creation and maintenance of such vital systems cannot safely be assumed to be automatically part of ‘doing development’.

It is too easy, then, to hide – wittingly or unwittingly – behind the notion that development naturally encompasses risk reduction without going through the discipline of assessing, analysing and hence consciously reducing risks. Ramón commented on this issue, stating that her colleagues assert their development work is, in itself, disaster reduction but she believes ECHO should be ‘... a bit more precise about what is added value in terms of disaster reduction’. Indeed, there are many examples beyond the frequently cited Hurricane Mitch, often associated with the building of homes on flood plains, that reveal how ‘development’, far from alleviating risk, can in fact ‘contribute to it’ (Peppiatt).

The unreliable assumption of development professionals that they are automatically reducing risk can also prevent policy becoming practice. Where a sense of ownership within donors has been secured at a high level (such as within the World Bank where reducing vulnerability is viewed as a key aspect of poverty alleviation), there can still be difficulties in percolating policy down to a practical and all-important implementation level.

The World Bank has experienced this problem despite the efforts of the Disaster Management Facility to mainstream risk reduction practices into development activities. This challenge is not faced by the World Bank alone. DFID was recently the target of a UK Parliamentary enquiry into Climate Change and Sustainable Development, coordinated by the International Development Committee (IDC). In response to the IDC’s question, ‘What is DFID’s policy on support for [disaster risk reduction] work?’, DFID provided the following written answer:

Disaster preparedness is central to reducing the impact of disasters on poor people’s livelihoods. This is recognised by DFID and reflected in our policies which aim to:

1. Enhance the effectiveness of the international system that carries out work on disaster preparedness (this includes UNDP, the World Bank ProVention Consortium, the International Federation of the Red Cross (IFRC), and the Pan-American Health Organisation); and
2. Ensure that disaster preparedness principles are integrated into country specific policies and plans, including our own country programmes, national policies with developing countries, and coordinated efforts such as Poverty Reduction Strategy Papers (PRSPs).

DFID does indeed award sizeable grants to major international institutes engaged in disaster risk reduction as claimed in point one. However, implementation of the commendable intentions of the second point through systematically integrating disaster

24 Supplementary memorandum submitted by DFID in May 2002.
risk principles into development programming appears still to be lacking since the publication of the key findings of the British Red Cross study\textsuperscript{25} in 2000. Despite some strong risk reduction initiatives being undertaken in several regions, this work is driven by circumstance or commendably enthusiastic individuals and hence is ad hoc in nature. This is because DFID does not have a clearly charted course for disaster risk reduction and a strategy is yet to be developed since the initial policy statement developed around six years ago. It appears, therefore, that within DFID there is an ownership disconnection between policy and implementation. However, since the commencement of this research, we have been informed that DFID-CHAD are convening an internal workshop with the express purpose of developing an action plan for the mainstreaming of risk reduction into DFID’s development work. This will include the development and dissemination of a risk reduction policy with the necessary high-level governmental support.

3. Broad Range of Disciplines

Those professionals trying to prevent disasters and deal with their consequences come from a broad range of disciplines. They may be natural and social scientists, engineers, architects, doctors, psychologists or development and humanitarian aid workers. They may also come from a range of organisations such as international aid agencies, governments, civil society, academia, independent consultancies and private sector business.\textsuperscript{26} This broad spectrum, whilst being a strength in the multi-faceted push to reduce disaster risks at all levels and across all sectors, simultaneously adds to the confusion regarding whose responsibility it currently is. Jeggle observes, ‘It may well be that, rather than expecting disaster managers or development professionals to lead the way regarding risk reduction, we should encourage teachers, meteorologists, engineers, civil servants etc to take the lead.’

This issue was raised by Von Däniken:

\begin{quote}
It’s very difficult to define [risk reduction] projects as such. It’s not a project minded approach – many actors and institutions are involved.
\end{quote}

Von Däniken observed that, with a sector such as health, there will be one ministry, but with risk reduction you must have three or four ministries ‘if you really want an impact’. Therefore, disaster managers and development professionals are seemingly left as partial contributors within a broad network of disciplines that range across a complex set of specialisms, and hence there is perhaps a disincentive for them to get actively engaged given the daunting scale of the task. This is a particular problem where a ‘generalist’ approach prevails in an agency, in which professionals are required to operate effectively across a broad range of areas, some of which may be unfamiliar territory.

\textsuperscript{25} NGO Natural Disaster Mitigation and Preparedness Projects
\textsuperscript{26} Adapted from the IFRC World Disasters Report 2002 (p.13)
Recommendations

1. Bridge the intellectual divide

The key challenge in risk reduction, in the view of Schaar (who draws on his own background with the Swedish Red Cross and IFRC, including three years spent in the disaster prone region of south-east Asia), is to get the two cultures of relief and development to meet:

The key challenge is to recognise and get a more general understanding of this dimension of poverty – the dimension of risk as part of being poor. Which is really about getting these two worlds and cultures to meet ... and we need to find innovative and intelligent ways of doing that.

Significantly, Schaar also points out that ‘risk’ is in fact the topic on which the two ‘worlds’ do meet. He implies, then, that while lack of understanding of the links between poverty and vulnerability acts as a barrier to integration, tackling this issue provides a real opportunity to bridge the relief–development divide.

We recommend, therefore, that those currently engaged in risk reduction (whether relief specialists or others) proactively seek to generate intra-agency discussion on the links between poverty, vulnerability and disasters. Inevitably, the onus is on those working in relief sectors, as they, to quote Schaar, ‘... see the need to address this and ... see what happens when it’s not done’.

This is clearly not easy. Part of the problem is due to a difference in style, underlying attitudes and values of relief and development ‘communities’ (see Table 1). There is often an element of jealousy or competition between these groups even when they are employed by the same agency. The roots of these attitudes may lie in the education and background of the staff. Each ‘culture’ needs to gain a better understanding of the values and attitudes of the other, and of how their respective work is both complementary to and vital for the safety and well-being of communities in hazard-prone areas. Internal training of relief and development specialists in risk reduction concepts and practice could assist with this.

Finding ‘innovative and intelligent’ ways of presenting the issue will help to ensure that development divisions are responsive and recognise risk reduction as relevant to their work. One of our contacts within DFID-CHAD informed us that DFID’s Sustainable Livelihoods Support Office (SLSO) successfully met with a group of consultants to discuss the meaning of vulnerability, and how this links with the sustainable livelihoods approach. One suggestion offered by Peppiatt is for relief specialists to adapt their language to suit the developmental environment:

If you start talking about ‘disasters’ to development people then there are problems. We should talk about ‘livelihoods’, as risk and vulnerability are central to this.

Many development staff come from backgrounds of political and social science, community and agricultural development, human geography, development studies and economics. In sharp contrast many relief workers in agencies and governments typically come from backgrounds of the military, civil defence and the emergency services.
Box 5 - The World Bank

Kreimer believes the Disaster Management Facility’s greatest challenge is, ‘Convincing the senior managers, governments and communities that disasters are related to vulnerability and this is an important part of the World Bank mandate’.

The DMF is trying to raise awareness of this within the Bank. It has undertaken a study to reveal how disasters impact development, and will use this to advocate increased corporate attention to the issue.

Building linkages outside of departmental divisions is, however, an ongoing battle. For instance, even when strong relationships have been formed in an endeavour to bridge cultural and intellectual gaps between departments, internal upheaval within organisations can weaken the effectiveness of the links. DFID-CHAD is currently facing this challenge. CHAD’s risk reduction linkages with departments in DFID’s Policy Division have been challenged by recent major restructuring, which in many cases has resulted in counterparts being shifted to other roles. Similarly, one of our contacts believed that it would take years for ECHO to ‘harmonise’ its risk reduction work with DG Development, partly as a result of frequent personnel changes and a subsequent lack of long-term vision.

2. Incorporate disaster risk into development assistance

As advised by the UNDP, whilst using recovery processes following disasters as unique opportunities for further reducing risks and vulnerabilities, donors should ensure that risk considerations are factored into all development assistance. This needs to go beyond policy level so as to be practically outworked in vulnerable communities.

One method often used to ensure that policy is outworked is the assignation of financial targets to specific activities. The difficulty here is that there needs to be a consensus of opinion across departments and institutions regarding what activity is labelled as disaster risk reduction (See Key Issue A: Knowledge). Moreover, risk reduction is not something that should occur in isolation from other forms of developmental assistance (unless perhaps for the purpose of demonstration projects). Ramón says, ‘You do not need a specific budget line for [disaster risk reduction] because you cannot do prevention on its own, it is always linked to something else.’

Therefore, financial targets may be arbitrary at this stage in the evolution of risk reduction understanding. Even if they were agreed and pressures exerted to hold donors accountable to them, there would be a danger that this would, rather than integrate the subject, further segregate it and maintain its position as an ad hoc activity for ‘special circumstances’.
Schaar proposes an alternative to setting financial targets:

When SIDA develops a country strategy it should consider the main obstacles to development. Therefore, in this initial analysis, there would be a clear dimension of risk. Programming based on such a country strategy would automatically have a risk reduction element permeating through the different sectors, and funding would then naturally follow on from the various sector-specific budget lines.

Accepting this principle, the following four stages provide a guideline to ensure that through good design, resources will be committed to reducing risks.

Firstly, there must be **policy and strategy level commitment** to the issue.

Secondly, the **engagement of development staff** through training initiatives, workshops, seminars and presentations needs to be emphasised and supported. A specialist risk reduction unit or individual/s should have the enthusiasm, responsibility and skills to oversee this. In addition, key resource people within each department or team should help ensure that policy is implemented, raising concerns regarding the problems being encountered. This would avoid CIDA’s experience where, ‘Despite the fact that the IHA Strategy outlined an action plan for CIDA, it was not circulated or discussed within the Agency’.

Thirdly, a **practical checklist** is required to support the development professionals in their outworking of policy (see page 26).

Fourthly, a **monitoring process** is necessary to ensure the checklist is used and to evaluate the impact of policy on the practice of the organisation.

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The Introduction of a Practical Tool

To aid the transition of disaster risk reduction from policy and strategy level to that of project approval, the IADB is in the process of developing a practical guide for its staff. This will take the form of a risk assessment ‘checklist’.

The checklist will be specific to each of the sectors the Bank operates in: education, health, housing, transportation, micro and small enterprise, agriculture and natural resources, water and sanitation, energy, and modernisation of the state. It is being designed by 36 staff members plus external consultants specialising in each of these sectors. Through this participation of internal staff it is envisaged that the checklist will be viewed by them as a useful aid to incorporating the risk dimension, and not as another set of unrealistic and unnecessary hoops to jump through.

Four of the IADB’s nine sector-specific checklists are nearing completion ahead of a seminar scheduled for September 2003 in Quito, Ecuador. This will provide an opportunity for staff to learn from and improve the approach before the completion of the full set of checklists at the end of 2003.

The IADB’s risk assessment approach ensures that projects are considered in light of hazards and vulnerabilities within the context of the Bank’s strategy. Critically, as pointed out in IHA’s evaluation of its disaster preparedness work, ‘Disaster risk management starts at the local level, as part of integrated, long-term community development.’ Therefore, any checklist must include perceptions of risk as expressed by the community.

With the IADB’s introduction of such a tool, a project will only be approved once it has been considered in light of the disaster risks it faces, the way in which it will withstand these risks, and the way in which it will help reduce them.

The IADB favours this approach on account of the relatively high level of capacities within the Latin America and Caribbean region, the general lack of conflict and the Bank’s focus on natural hazards as a threat to development. However, a conclusion of this research project is that the principles, whilst no doubt requiring substantial adaptation to suit varying contexts outside the Latin America and Caribbean region, can be usefully copied.

Box 6 - CIDA

CIDA is working to integrate disaster risk management at the policy and programme levels. Its Climate Change Working Group (CCWG) is comprised of representatives from each branch, who provide guidance to programme managers and share lessons learned about issues including disaster risk reduction. The CCWG also plans to adapt or design relevant tools to help CIDA officers integrate disaster risk management into development programming.

3. Evaluate Effectiveness

Once disaster risk has been incorporated into the design phase of all developmental projects in vulnerable locations, and as a result measures are adopted that attempt to reduce those risks explicitly or implicitly within the delivery of the project, it will be necessary to evaluate the effectiveness of these measures. Feedback from evaluations will help strengthen the level of commitment amongst development professionals to improve and outwork risk reduction principles.
Key Issue C: Competition

There's enough common sense in [risk reduction] that it has validity in itself … the only question is why are we not acting more forthrightly? (Ressler)

The research highlighted that, whilst many donors believe in the concept of disaster risk reduction and believe that much more can and should be achieved in this field, a very real struggle to implement risk reduction measures in high-risk areas pervades. This struggle is in part due to both valid and invalid differing priorities as expressed by communities and high-level decision makers.

1. Recognition of the value of disaster risk reduction

Humanitarian aid specialists, through working with disasters on a daily basis, are convinced that risk reduction is a worthwhile investment. We asked Borns whether OFDA could prove that its risk reduction work is cost effective. His response was that while risk reduction is very hard to measure and no cost-benefit or other study has been done by OFDA (cost-benefit analyses are notoriously hard to apply to natural disasters), 'There's no doubt in our minds that spending money now on good mitigation and preparedness activities more than pays off.'

Kreimer also believes that risk reduction is a worthwhile investment. She informed us that the World Bank undertook a study attempting to determine the added value of disaster prevention to a development project, and concluded that the return on investments was 'very substantial'. DIPECHO, like all other donors included in this report, has not undertaken any formal cost-benefit analyses. However, despite such lack of concrete 'proof' that disaster risk reduction is an investment and not a cost, Ramón states, 'The perception of ECHO is that DIPECHO brings added value.' The SDC’s Humanitarian Aid department is also convinced that risk reduction ‘pays’. Von Däniken informed us that it does not suffer from what he described as ‘donor reluctance’ to fund risk reduction programmes. After 25 years of relief work,

... we know where we should put our money ... We are convinced that disaster prevention and preparedness is cost effective but we can’t prove it. But we're definitely convinced.

There also appears to be growing concern regarding the economic impact of disasters outside humanitarian aid departments and across donor organisations as a whole. As Freeman et al. observe, 'The need to formally include disaster losses in the planning process has been recognised by the World Bank, the United Nations (UNDP), the Inter-American Development Bank [and others]. In Latin American and Caribbean countries in particular, there has been recognition of the 'value of disaster reduction measures in reducing and alleviating serious economic disruptions and thus in determining a country’s path towards economic growth.' The IADB was motivated to invest in risk

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reduction following the immense losses caused by hurricanes Mitch and George, the earthquake in Colombia and the effects of El Niño in 1998, and the Venezuela floods and El Salvador earthquake of 1999. Keipi (Sustainable Development Department, IADB) explains, 'The IADB developed a greater sense of urgency to do prevention so that countries do not get in debt and the poverty index does not soar.'

Jeggle summarises: 'Changes do not come about because people are killed, changes come about as a result of financial losses.'

With such evidence of donor conviction that risk reduction is a worthwhile investment in vulnerable countries, the fundamental question is why it struggles to obtain a higher priority within relief and, more significantly, development assistance.

2. Differing priorities of communities and high-level decision makers

Relief specialists endeavouring to tackle the issue of disaster prevention face a major constraint. The attempt of humanitarian aid departments to undertake risk reduction initiatives is set against a backdrop of rising numbers of disasters and hence an increased pressure to respond. Our contacts in CIDA informed us that CIDA allocates 7 – 8 per cent of its humanitarian budget to risk reduction, and Hodge (IHA, CIDA) stated, ‘Given the needs that there are and the demands that are placed on the humanitarian aid budget that's as far as we are able to go.’ Borns is facing similar tensions within OFDA: ‘...good [disaster risk reduction] more than pays off ... the only real limitation is that when push comes to shove are you going to do mitigation or are you going to respond?’ Ressler summarises the problem faced by humanitarian divisions:

The scale of human needs right now in the world today is so overwhelming, simply meeting humanitarian needs exceeds all the systems we have in place ... the humanitarian situation is so acute that governments, agencies and donors may argue that they should not put funds into something perceived as having a limited impact on people.

The answer to this problem is to mainstream risk reduction into development. Hodge argued that the struggle for resources within CIDA’s IHA Division is ‘...partly why we want to have it mainstreamed into development thinking ... it makes more sense in terms of the actions that can be taken on and the amount of energy and human resources the agency can devote to it’. She also believes that mainstreaming the issue will increase the financial resources allocated for it: ‘...within our ... small budget and the pressures that we have on our overall humanitarian resources, I don’t think we are going to be able to do much more, which is also another reason to put it through the development side of the house...’ Gander gave the example of one bilateral disaster prevention project with a budget of C$11 million, while an IHA disaster preparedness project in the same country had about 5% of that total. Clearly the bilateral project had more far potential to promote sustainable long-term risk reduction. DFID-CHAD is also over-stretched through needing to tackle recurrent emergencies, yet it has engaged in risk reduction on a limited basis. It too believes that the issue must be taken up by development divisions if it is to be tackled effectively.

However, while there are constraints to humanitarian aid divisions investing more in risk reduction, the same is true for development divisions. The need to engage with other important issues was frequently given as a reason why more development finances could
not, or should not, be invested in risk reduction. The EU prioritises health and education over risk reduction and consequently funding for the latter is limited. Kreimer observed that, within the World Bank, all other development issues act as ‘competition’ to risk reduction, which is viewed as no more important than other ‘hot topics’. Aysan asserts that the level of priority given to the issue by the UN is ‘... not a misrepresentation in relation to ... the [global] scale of problems and issues’.

Whether the current level of priority awarded to disaster risk reduction vis-à-vis other development needs is a ‘misrepresentation’ is a fundamental question. In the IADB’s natural disaster action plan it is stated: ‘Local communities, already stressed by their daily struggle for better employment, health, basic education and other needs, have not pressured their local and national leaders to do more to reduce their vulnerability to disaster.’ Moreover, as highlighted by Red Cross Vulnerability and Capacity Assessments (VCA) in Palestine and Bangladesh, even when an NGO or donor prioritises risk reduction within its agenda, often the community can have a different perception of what its primary needs actually are. This was noted by IHA:

Most of the projects visited were relevant at the local level because the target communities were vulnerable to natural hazards and needed disaster preparedness training. However only two projects seemed to be demand-driven, i.e. they responded to identified community needs and interests ... Beneficiaries of the four other projects indicated that their top priorities would be health care, housing, employment, etc. while disaster preparedness would be relatively less important.

It is not surprising that a ‘vulnerable’ community finding it difficult to survive on a daily basis focuses on its immediate requirements rather than on out-of-the-ordinary occurrences. As Peppiatt observes, investing in disaster preparedness is often an ‘unaffordable luxury’ for the very poor. However, at a macro level, amongst those with an ability to decide on the emphasis needed to reduce a community’s long-term vulnerability, is a similar attitude of non-engagement with the issue acceptable?

Clearly, and as the research revealed, non-engagement can be due to a number of valid development issues ‘competing’ with natural disasters. With reference to a recent Low Development Country (LDC) conference, Aysan stated:

Out of 49 LDCs, many are disaster prone and losses are at their highest. However, at the LDC conference the agenda was about trade and debt, not disaster risk. This is what the Finance Ministers are saying is their priority.

Aysan also recounted a recent experience of trying to talk to the government of Malawi about floods. She explained that the government was much more interested in discussing HIV/AIDS than disaster prevention, as this issue poses the greatest threat to the people of southern African countries.

Conflict is also increasingly competing with natural disasters. Peppiatt observed:

There is an emphasis now on global security and terrorism. Conflict is perceived as being the major threat to development [and so] natural hazards always seem peripheral.

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33 Facing the Challenge of Natural Disasters in Latin America and the Caribbean (2000).
34 In Towards a New Disaster Risk Management Approach for CIDA (2002).
Undeniably these are important issues. However, it cannot be denied that invalid political priorities also play a role in pushing risk reduction down the agenda. One contact asserted that disaster risk reduction is sometimes ignored or delayed in application because of ‘confusing, conflicting and unacceptable priorities as expressed by the affected country’. For instance, Jeggle questions how much money some countries have allocated to their military in recent years in comparison with disaster risk reduction, where natural disasters have killed many thousands but relatively few have died as a result of conflict.

It is interesting to note that, whereas risk reduction is constantly fighting to ‘prove its worth’, politicians do not often raise the question of ‘cost-benefit analysis’ regarding proposed emergency relief programmes. This is probably due to the reasoning outlined by Haghebaert, who observed that the high ‘visibility’ of relief work, and the profile a government can acquire through being seen to respond to major disasters, can all contribute to a government prioritising it over risk reduction. As another contact observed, if there happens to be a disaster during a politician’s term of office then much aid will be received and a politician can be seen to be responding. This will increase the chance of re-election, while prevention investments – especially in a four-year government period – may not reap such glamorous rewards.
Recommendations

1. Highlight evidence of success

a) Cost-Benefit Analysis

The research highlighted that there is a need for more concrete evidence of the cost-effectiveness of risk reduction. This is required to help convince development sectors that investing in disaster preventive action is worthwhile.

Davis (project consultant) states:

It is ... likely that if [cost-benefit and cost-effectiveness] tools become the ‘norm’ in project assessment then there will be a significant increase in risk reduction projects since favourable benefits, over costs, are likely to emerge from such economic appraisal.

Schaar, despite believing risk reduction to be ‘common sense’, endorses this by asserting that it would be helpful to have ‘harder figures’. Peppiatt also argued the need for cost-benefit analyses, stating that currently the ‘economic rationale’ for risk reduction is not strong enough to convince the development specialists and, critically, the economists (including those working on PRSPs in developing countries) that risk reduction pays.

Cost-benefit models are notoriously difficult to apply to disasters and much needs to be done to develop and adapt them. However, as Pisano observed, the alternative is to wait for another major disaster/s to provide the rationale for engaging more extensively in risk reduction. He says, ‘If we woke up and there was no Tokyo, this would change the landscape of international assistance for disasters.’

b) Evaluations

One of our contacts within DFID-CHAD was unable to state categorically that risk reduction proves cost effective and admitted that this was in part due to the fact that DFID does not consistently and effectively review its risk reduction work (DFID is not alone in this). Such an admission is unsurprising if risk reduction is not an objective of sustainable development programmes from the outset. As has been noted in this report, prior to evaluation it is necessary to be clear on what is being defined as risk reduction and subsequently to incorporate this into the design phase of an initiative. Only then will there be a benchmark to measure impact and effectiveness.

c) Case Studies

Schaar informed us that SIDA has been involved in programmes with a risk reduction focus in Africa. He observed that a Swedish-supported conservation farming programme in Zambia contributed to resilience against the recent drought.
Fankhauser and Von Däniken illustrated their conviction that risk reduction is cost effective with an example of a flood prevention project the SDC had undertaken in the Ukraine in 1999. It had invested 1 million Swiss Francs in the project, which they believed protected several thousand people and prevented an estimated 20 million Swiss Francs' worth of damage when another flood hit the region in 2001. 'We protected 15,000 people ... without [our intervention] they would have been under water.'

Such examples, if produced in the form of written case studies, would prove useful in demonstrating the validity of risk reduction within development programming.

2. Be imaginative

Ressler asserts, 'We have to do disaster risk reduction but understand the context we are working in.' Aysan agrees with this. She argues that, when trying to promote the issue, other valid development needs must be considered: 'The development package has a limit at the moment, and everyone is trying to throw something new into the pot.' Consequently she asserts that the issue must be tackled 'imaginatively':

The pot is not likely to increase so much. Therefore we should probably concentrate on being more effective and imaginative within it.

In practice, this means building risk reduction initiatives into the existing context, agenda and priorities of developmental strategies. As Freeman asserts: "Risk management must be a formal component of development planning for countries with high natural catastrophe exposure..." (See Recommendations of Key Issue B: ‘Ownership’). This has to be demand driven by disaster-prone countries as country priorities are a key driver in determining the focus of donor programmes. Recognising this, the IADB is actively engaged with national decision makers. For instance, the Bank hosts ‘Regional Dialogue Meetings’ with Ministry of Finance officials - and others - from the countries within its region of operation. One recent meeting, as aforementioned, was on the subject of local risk management. Keipi asserts that these officials need to understand and be convinced of the importance of risk reduction as they are significant players in defining country strategies.

If risk reduction is built into existing plans and processes, it will be seen less as competing with other development needs and more as an integral and vital part of development itself. Schaar informed us that the Swedish parliament is forming a new bill, requiring poverty alleviation to be an overriding goal of Swedish aid. He stressed the need to ensure that the risk reduction dimension is included in SIDA’s description of what poverty means. If we manage this, he argued, ‘it would be such an integral element that we wouldn’t need to see it as one area that competes with others’.

There may be a need to demonstrate the links between disasters and particular development issues. For instance, as Peppiatt observes, ‘In southern Africa HIV/AIDS is increasing the vulnerability of poor communities to a whole range of disasters such as food insecurity.’

36 The UNDP’s forthcoming World Vulnerability Index may assist with identification of high-risk countries.
Some donors are using the issue of climate change to increase awareness of, and attention to, the need for disaster risk reduction. However, several of our contacts observed a danger in using climate change as a ‘hook’ in this way. This relates to over-focusing on environmental vulnerabilities to disasters, while neglecting other causes of vulnerability such as social, economic and political factors. Therefore, when using the threat of climate change to promote disaster risk reduction, the focus must always be on assessing all forms of vulnerability to hazards and the need to address these if communities are to cope with current events let alone with any intensification of hazards attributed to climate change. (Interestingly, CIDA is using its Climate Change Working Group to promote the integration of risk reduction into development planning – see Key Issue B: Ownership recommendations.)
Conclusion

The rich world’s scant investment in natural disaster risk reduction is illogical and indefensible. Rich nations, when facing a threat to their security or well-being, mobilise and invest massive resources to protect their interests. They do not do the same for poor countries threatened by disaster, although they frequently plough major resources into relief and recovery operations once a disaster has struck. It would make more economic sense for rich nations to invest greater resources in risk reduction with vulnerable countries. As Ressler observes, ‘...in light of increasingly fragile social, political, economic and natural environments, the longer we delay in addressing risk reduction and preparedness, the greater the impact, scale and cost of emergencies’.

It would also make greater moral sense for the rich world to help prevent needless loss of life from disasters in the developing world than simply to provide aid and sympathy after disaster strikes. Yet a society’s sense of the morality or otherwise of such a situation will depend upon its values and principles of justice and equity influencing its perception of duty and responsibility for others. The Millennium Development Goals (MDGs) are a positive step towards achieving a more just and equitable world. However, whilst policy makers are currently considering the inclusion of a humanitarian aid goal within the MDGs, disaster reduction itself is not given adequate attention. Therefore it is crucial that, as donors increasingly focus their interventions to meet these goals, they recognise and account for the serious threat that disasters pose to them.

If risk reduction is to acquire a higher political profile, it must be thoroughly integrated into development policy and practice. As our research shows, many representatives of donor agencies say this themselves, and are affirmed by other organisations and independent experts. Therefore, this report is aimed primarily at development sectors of donor organisations where greatest progress needs to be made in terms of understanding, owning and addressing risk reduction within the context of their work. The development and widespread use of a practical tool, such as a checklist, is a positive step towards this. However, humanitarian/relief sectors have a dual responsibility. They must seek to mitigate disaster risks where possible within relief interventions, and they may need to take the lead in promoting and developing a strong corporate understanding of the issue within a donor organisation.

We readily acknowledge that the failure to ‘mainstream’ disaster risk reduction into development has long been the subject of discussion among the risk reduction community. We do not claim to have made a new discovery here. However, this report has identified the main impediments to mainstreaming and proposed some practical steps towards overcoming them. We hope this will encourage new and more effective risk reduction action by donors and other organisations, particularly:

* moves to integrate risk reduction into all development programming in disaster-prone countries, including the development of tools for community-based risk assessment and to aid development professionals in their analysis and reduction of risks
* support given to individuals and units focused on making the above happen
* advocacy to help remove the underlying causes of vulnerability
Unless these and other actions are taken as a matter of urgency, preventable disasters will continue to undermine the efforts of poor people to escape poverty and the efforts of rich countries to help them. More investment in risk reduction as a ‘mainstreamed’ component of relief and development interventions, on the other hand, will save lives, safeguard development efforts and add value to them. There is no valid reason why this investment cannot be made.
Sources

Blaikie et al., 1994, At Risk: Natural Hazards, People’s Vulnerability, and Disasters. London: Routledge


Appendix 1

Methodology

Table 2 - Donor Organisations

<table>
<thead>
<tr>
<th>Date of meeting</th>
<th>Organisation</th>
<th>Sector</th>
<th>Contact</th>
<th>Meeting Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/02/03</td>
<td>United Nations</td>
<td>Disaster Reduction Unit, (DRU), United Nations Development Programme (UNDP)</td>
<td>Yasemin Aysan (Acting Chief, Disaster Reduction &amp; Recovery Programme)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>6/02/03</td>
<td>United Nations</td>
<td>Office of Emergency Programmes, United Nations Children’s Fund (UNICEF)</td>
<td>Everett Ressler (Senior Programme Officer)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>7/02/03</td>
<td>Swiss government</td>
<td>Humanitarian Aid + SHA, Swiss Agency for Development &amp; Cooperation (SDC)</td>
<td>Beat Von Däniken (Programme Officer) Rudolf Fankhauser (Programme Officer)</td>
<td>Bern, Switzerland</td>
</tr>
<tr>
<td>10/02/03</td>
<td>European Union</td>
<td>ECHO Disaster Preparedness (DIPECHO)</td>
<td>Helena Ramón Jarraud (ECHO Desk Officer)</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>11/02/03</td>
<td>European Union</td>
<td>European Commission Humanitarian Office (ECHO)</td>
<td>Peter Billing (Head of Sector for Strategic Planning)</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>11/02/03</td>
<td>European Union</td>
<td>DG RELEX India</td>
<td>Rensje Teerink (Administrator)</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>11/02/03</td>
<td>European Union</td>
<td>DG Environment</td>
<td>Ernst Schulte (Principal Administrator)</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>18/02/03</td>
<td>Swedish government</td>
<td>Humanitarian Affairs and Conflict Division, Swedish International Development Agency (SIDA)</td>
<td>Johan Schaar (Head of Division)</td>
<td>Conference call</td>
</tr>
<tr>
<td>25/02/03</td>
<td>World Bank</td>
<td>Disaster Management Facility (DMF)</td>
<td>Alcira Kreimer (Manager)</td>
<td>Washington, USA</td>
</tr>
<tr>
<td>25/02/03</td>
<td>US government</td>
<td>Office of Policy Planning, United States Agency for International Development (USAID)</td>
<td>Letitia Butler (Director)</td>
<td>Washington, USA</td>
</tr>
<tr>
<td>26/02/03</td>
<td>US government</td>
<td>Disaster Response &amp; Mitigation Division (DRM), Office of Foreign Disaster Assistance (OFDA)</td>
<td>Jeff Borns (Director)</td>
<td>Washington, USA</td>
</tr>
<tr>
<td>26/02/03</td>
<td>Inter-American Development Bank (IDB)</td>
<td>Environment Division, Sustainable Development Department</td>
<td>Kari Keipi (Senior Natural Resource Specialist) Victoria Imperiale (Disaster Risk Management Specialist)</td>
<td>Washington, USA</td>
</tr>
<tr>
<td>Date of meeting</td>
<td>Organisation</td>
<td>Sector</td>
<td>Contact</td>
<td>Meeting Location</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------</td>
<td>--------</td>
<td>---------</td>
<td>------------------</td>
</tr>
<tr>
<td>04/03/03 &amp; 18/06/03</td>
<td>UK government</td>
<td>Conflict &amp; Humanitarian Affairs Department (CHAD), Department for International Development (DFID)</td>
<td>Fenella Frost (Programme Officer - Disaster Reduction) Peter Troy (Head of Humanitarian Programmes Team) Rob Holden (Head of Crisis Management Group)</td>
<td>London, England</td>
</tr>
<tr>
<td>10/03/03</td>
<td>Canadian government</td>
<td>International Humanitarian Assistance (IHA), Canadian International Development Agency (CIDA)</td>
<td>Christine Hodge (Senior Programme Officer) Catherine Gander (Consultant)</td>
<td>Conference call</td>
</tr>
<tr>
<td>18/06/03</td>
<td>UK government</td>
<td>Latin America Department (DFID)</td>
<td>Mick Strikland (Programme Officer)</td>
<td>London, England</td>
</tr>
<tr>
<td>18/06/03</td>
<td>UK government</td>
<td>Overseas Territories Department (DFID)</td>
<td>Nigel Kirby (Engineering Advisor) Alison Girdwood (Programme Manager)</td>
<td>London, England</td>
</tr>
<tr>
<td>18/06/03</td>
<td>UK government</td>
<td>Policy Division (DFID)</td>
<td>Sarah Dunn (Head of Performance Delivery Group)</td>
<td>London, England</td>
</tr>
<tr>
<td>18/06/03</td>
<td>UK government</td>
<td>‘Climate Change Team’ (DFID)</td>
<td>Jessica Troni Thomas Tanner</td>
<td>London, England</td>
</tr>
</tbody>
</table>
### Table 3 - Other Contacts

<table>
<thead>
<tr>
<th>Date of Meeting</th>
<th>Organisation</th>
<th>Contact</th>
<th>Meeting Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/02/03</td>
<td>ProVention Consortium Secretariat</td>
<td>David Peppiatt (Secretariat Manager) Bruno Haghebaert (Officer)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>05/02/03</td>
<td>International Federation of Red Cross and Red Crescent Societies (IFRC)</td>
<td>Yvonne Klynman (Senior Officer Disaster Policy)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>06/02/03</td>
<td>United Nations International Strategy for Disaster Reduction (ISDR)</td>
<td>Salvano Briceño (Director) Francesco Pisano (Senior Officer) John Harding (Associate Officer, Scientific and Technical Coordination) Helena Molin-Valdes (Senior Policy Officer)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>06/02/03</td>
<td>Independent Consultant</td>
<td>Terry Jeggle (Hazard and Disaster Risk Management)</td>
<td>Geneva, Switzerland</td>
</tr>
<tr>
<td>11/02/03</td>
<td>The Centre for Research on the Epidemiology of Disasters (CRED)</td>
<td>Debby Guha-Sapir (Director)</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>26/02/03</td>
<td>The World Bank</td>
<td>Katherine Marshall (Director and Counsellor to the President, Development Dialogue on Values &amp; Ethics)</td>
<td>Washington, USA</td>
</tr>
<tr>
<td>27/02/03</td>
<td>World Relief (NGO)</td>
<td>Stephen Houston (Director, Disaster Response) Brandon Pustejovsky (Desk Officer, Disaster Response)</td>
<td>Washington, USA</td>
</tr>
</tbody>
</table>
Indicators

The following tables, indicating levels of funding and staffing awarded to disaster risk reduction within relief/development departments and budgets, suggest a low level of support for the issue. However, through undertaking the research, we have increasingly recognised that the level of prioritisation awarded risk reduction goes beyond the quantity of staff and funding dedicated to it. Instead, the extent and effectiveness of disaster risk reduction is heavily influenced by the approach adopted by organisations, for which there are no simple measurable indicators.

Table 4 reveals the number of staff working with the specific mandate of disaster risk reduction within a donor agency’s headquarters. It is accepted that risk reduction may (and should) form part of other headquarter staff’s roles, unaccounted for here. Numbers of staff working on risk reduction in regional and country offices are not included in table 4, as this information proved difficult to obtain.
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Total No. of Staff</th>
<th>No. of Risk Reduction Staff in Headquarters</th>
<th>Location of Risk Reduction Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian government - CIDA</td>
<td>1,600</td>
<td>1 @ 1 day a month</td>
<td>International Humanitarian Assistance Policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 full time</td>
<td></td>
</tr>
<tr>
<td>European Union - ECHO/DIPECHO</td>
<td>225(^{37})</td>
<td>5</td>
<td>DIPECHO / ECHO</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>1,600</td>
<td>16</td>
<td>Environment, Finance and Infrastructure divisions</td>
</tr>
<tr>
<td>Swedish government - SIDA</td>
<td>650</td>
<td>18 (also on conflict)</td>
<td>Humanitarian Affairs and Conflict Department</td>
</tr>
<tr>
<td>Swiss government - SDC</td>
<td>619</td>
<td>Information unavailable at time of publication</td>
<td></td>
</tr>
<tr>
<td>UK government - DFID</td>
<td>2,695</td>
<td>1 full time, 4 part time (with the ability to call upon a group of approx. 20 advisors with risk reduction knowledge)</td>
<td>Conflict and Humanitarian Affairs Department</td>
</tr>
<tr>
<td>United Nations - UNDP</td>
<td>4,000(^{38})</td>
<td>5</td>
<td>Disaster Reduction Unit</td>
</tr>
<tr>
<td>US government - USAID</td>
<td>7,912</td>
<td>Information unavailable at time of publication</td>
<td></td>
</tr>
<tr>
<td>World Bank</td>
<td>10,000</td>
<td>5</td>
<td>Disaster Management Facility</td>
</tr>
</tbody>
</table>

\(^{37}\) Total no. of staff within the relief sector of the EU

\(^{38}\) Total no. of staff within the development sector of the UN
The figures and information in Table 5 were provided by our contacts within each donor organisation, verbally in the course of our meetings/dialogue with them. **Table 5 is not, therefore, a comprehensive guide to the funding of risk reduction by donors.** This would require much more in-depth research.

### Table 5 - Risk Reduction Funding

<table>
<thead>
<tr>
<th>Government</th>
<th>Funding Details</th>
</tr>
</thead>
</table>
| **Canadian government** | CIDA: The International Humanitarian Assistance (IHA) Division has funded disaster preparedness projects for over a decade. Disaster prevention accounts for 7–8 per cent (C$3.5 million) of CIDA’s annual humanitarian assistance budget of C$40–50 million. Our contacts told us ‘... this is very little ... some of our bilateral programmes are over C$30 million for one country’.  
CIDA also manages Canada’s Climate Change Development Fund (CCCDF), a C$100 million five-year initiative. About one-fifth of that total (at least C$17.5 million) goes towards the adaptation programme that seeks to reduce the vulnerability and increase the capacity of developing countries to adapt to the adverse effects of climate change (such as weather-related disasters).  
In addition to implementing CCCDF adaptation projects, some CIDA bilateral programmes contain risk reduction elements – such as food security. Our contacts informed us that they had attempted to calculate what proportion of CIDA’s development budget was spent on risk reduction, but the corporate information was not available. |
| **European Union**   | DIPECHO: 8 million Euros a year specifically for risk reduction.  
ECHo: ECHO’s budget is 500 million Euros a year. The European Parliament has requested that ECHO allocate 10 per cent of its budget to risk reduction. Although ECHO is not consciously acting on this requirement, Ramón believes that the requirement is nevertheless being met: ‘It’s a question of how you measure it.’ Billing also believes that ECHO spends more on risk reduction than is immediately calculable.  
We could not acquire figures for funding allocated to risk reduction from the EU’s development budget. |
| **Inter-American Development Bank**| The IADB’s annual lending is between US$4 billion and US$9.5 billion. Average disaster related lending between 1998 and 2001 was US$400 million. |
| **Swedish government** | SIDA: We were informed that SIDA spends ‘Relatively little ... on preparedness and prevention’ – probably less than 10 per cent of its humanitarian budget (which constitutes 10–15 per cent of its total budget).  
Our contact observed that it would be difficult to determine how much of SIDA’s development budget was spent on risk reduction: ‘[Risk reduction] doesn’t have a very clear home within SIDA and it has been difficult for SIDA to identify programmes and projects with this specific objective.’  
SIDA also allocates money to community disaster risk reduction through the Swedish Red Cross. |
| **Swiss government**  | SDC: The SDC Humanitarian Aid aims to spend 10–20 per cent of its overall humanitarian aid budget on ‘disaster prevention/ preparedness’ (around 20 million Swiss Francs).  
Its development budget is 800 million Swiss Francs a year but we were unable to discover how much of this would be allocated to disaster risk reduction. |
| Table 5 - Risk Reduction Funding |

**UK government**  
**DFID:** CHAD has an annual risk reduction budget of approximately £5 million, which is divided between international organisations such as the International Strategy for Disaster Reduction, Pan-American Health Organisation and the ProVention Consortium. One of our contacts informed us that DFID has not undertaken an audit to determine how much of its development budget is spent on risk reduction, and that, while such an audit could prove useful, it would only be a ‘rough guide’.

**United Nations**  
Information unavailable at time of publication.

**US government**  
**USAID:** The majority of OFDA’s funding is spent on relief operations. OFDA aims to allocate 10 per cent of its emergency budget ($10–20 million) to risk reduction, but this can ‘get pinched’ when a big emergency occurs.

We were not given a figure for funding allocated to risk reduction from USAID’s development expenditure.

**World Bank**  
The Bank’s total annual lending is $16–19 billion, of which $3–5 billion a year will be spent on operations linked to emergencies – including preparedness, mitigation and response.
**Questionnaire**

The following questions were put to donors. As the aim of the research was to determine the level of priority placed on risk reduction and the rationale behind this level of priority, we focused particularly on questions 4 and 5.

**Box 7 – Questionnaire**

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1. How and where does your organisation focus its resources to reduce disaster risks? | i.e.  
* in which countries  
* in which sectors (e.g. agriculture, health, public education, etc)  
* at which levels (i.e. community level, national, regional, etc)? |
| 2. How does it make such selections?                                     |                                                                                                  |
| 3. How/where does disaster risk reduction fit into your organisation’s relief and development structures and processes? (Does it think disaster risk reduction should be promoted as a separate entity or fully integrated into development planning/programming?) |                                                                                                  |
| 4. What level of priority does disaster risk reduction have within your organisation? | i.e.  
* long-term security of risk reduction programmes  
* number of staff working on the issue  
* proportion of overall development budget spent on risk reduction? |
| 5. Can you explain the reasons behind your organisation’s current level of expenditure on disaster risk reduction? What would cause your organisation to allocate more resources to it? |                                                                                                  |
| 6. How does your organisation evaluate the effectiveness of risk reduction measures? Does it believe risk reduction is cost effective? (Has it undertaken any cost-benefit analyses?) |                                                                                                  |
| 7. Do you have any other comments or observations (e.g. trends in risk reduction expenditure, previous difficulties, future challenges, etc)? |                                                                                                  |
Appendix 2

Southern government policy and practice on natural disaster risk reduction

During the period in which Tearfund met or spoke with donors, organisations and experts to discuss disaster risk reduction policy and practice, several of Tearfund’s partners met with their own local municipalities and/or national governments to do the same. The set of questions used by partners to guide their meetings with government representatives, and some of the responses they received to these questions, are recorded in this appendix.

The comments made by officials within the Bangladesh, Honduras, India and Malawi governments provide evidence of both progress and difficulties in the field of risk reduction at southern government level. It is interesting to note the synergies between the problems outlined by these officials and those presented by donors as detailed in this report.

With the exception of India, the comments were collated by Tearfund partners working in these countries. Comments included in this appendix were selected on the basis of relevance to the research project’s objectives. Some of the comments have received minor editing to assist in providing clarity of expression.

**Bangladesh:** contributions supplied by: Aminur Rahman, Training Director and Mohsena Ferdous, Deputy Director ‘Disaster Management Bureau’, government of Bangladesh. Facilitators: Muzzaffar Ahmad and Uttam Dewan, KOINONIA.

**Honduras:** contributions supplied by: the municipality of Juan Francisco Bulnes (JBF), the municipality of Brus Laguna (BRL) and the municipality of Puerto Lempira (PLP). Facilitator: Osvaldo Munguia, Executive Director MOPAWI.

**India:** contributions supplied by: Dr. P.K Mishra, Chief Executive Officer, The Gujarat State Disaster Management Authority.

**Malawi:** contributions supplied by: James Chiusiwa, the government of Malawi’s Chief Relief Officer, Department of Disaster Preparedness, Relief and Rehabilitation. Facilitator: Canaan Phiri, Advocacy Officer, the Evangelical Association of Malawi (EAM).

1. How does your government work to reduce the risk of natural disasters?

**Bangladesh**

The government of Bangladesh, since its independence in 1971, has established a separate ministry called the Ministry of Relief, which was then turned into the Ministry of Relief and Rehabilitation in the late seventies. After a number of disasters, the government created a separate bureau (the Disaster Management Bureau) in 1992 in order to speed up its activities in pre- and post-disaster periods. The government has also
created a strong National Disaster Management Council, which meets at least twice in a year. Apart from this, there are Disaster Management Committees at district, sub-district (upazila) and union (last tier of local government administration) levels.

**Honduras**

The Municipality of Brus Laguna (BRL): Co-ordinating the Municipal Emergency Committee (CODEM), and building its capacity to reduce the risk of storms, hurricanes, fires, etc. Planning to co-ordinate Local Emergency Committees.

The Municipality of Juan Francisco Bulnes (JBF): Preventing deforestation on river banks and beaches, natural disaster training in some communities.

The Municipality of Puerto Lempira (PLP): This Municipality has created the Municipal Environment Unit (UMA), and managed local watersheds to secure quality and supply of water.

**India**

The government of Gujarat (GoG) has a vision of building a state which has the capacity, capability and resources to cope with natural disasters. Keeping this in mind, the government has focused not only on structural aspects but also on non-structural aspects of disaster mitigation and preparedness. The disaster management activities of GoG include retrofitting of hazardous buildings, strict enforcement of building codes for new construction and reconstruction of buildings, simplification of General Development Control Regulations, demolition of unsafe buildings in high seismic zone areas, construction of water harvesting structures for water storage, revision in syllabus of colleges to include disaster mitigation components, etc.

Apart from this, the government aims to provide information to various respondents like government officials and staff, civil society and individuals, regarding disaster preparedness. For this, it has directed its efforts on disaster management capacity building through education, information sharing and dissemination*, hazard-related research and training.

*Information dissemination: Various guidelines were issued on different facets of construction such as quality control of material and multi-hazard resistant buildings. School students were given training on rescue through mock drills. Booklets on Dos and Don’ts of earthquake and cyclone preparedness were distributed to disaster-prone places. Buses were used to display messages on multi-hazard resistant construction and retrofitting. Local people were educated on disaster preparedness through street shows, audio and visual cassettes. In various villages, individuals were identified who formed a Disaster Preparedness Brigade. They are responsible for disseminating information on disaster preparedness and mitigation.

**Malawi**

To reduce the risk or adverse effects of floods and droughts, at the beginning of each season (around October) the Meteorological Department (MET) issues a climatic forecast - i.e. whether Malawi should expect normal to above or below average rainfall. The Ministry of Water Development also monitors water levels and warns the
Department of Disaster Preparedness, Relief and Rehabilitation, which in turn warns people through District Commissioners to take necessary precautions.

In the case of anticipated floods, District Commissioners are requested to:
(i) Warn their people in flood plain areas to move to higher ground
(ii) Propose mitigation projects.
In the case of drought, organisations such as MET, Ministry of Agriculture’s Early Warning Unit, Famine Early Warning Systems (FEWSNET) monitor rain patterns and give early advice as to what ought to be done.

2. Why has your government decided to work in this way?

India

After the earthquake of January 26th, 2001 there was a paradigm shift from a relief oriented approach to a prevention and mitigation oriented one. It is believed that the activities related to prevention, mitigation and preparedness should be undertaken at all levels. Thus, the vision of the government is to reduce the vulnerability of people towards any possible disaster and to ensure the sustainable development of the state.

3. How does disaster risk reduction fit into your government’s relief and development structures?

Bangladesh

The Disaster Management Bureau (DMB) has about one hundred staff and is headed by an Additional Secretary to manage the reduction of disaster risk. Its general responsibilities are:

a) To advise the government on all matters relating to disaster management

b) To maintain liaison with different government agencies, aid-giving agencies, NGOs and voluntary organisations and ensure maximum co-operation and co-ordination in all matters of disaster management

India

After the earthquake of January 26th, 2001, GoG organised a massive exercise of rehabilitation and reconstruction programme (R&R). For the successful implementation of R&R, GoG has set up the Gujarat State Disaster Management Authority (GSDMA). It is a nodal agency that co-ordinates and monitors the work for disaster risk reduction, mitigation and preparedness.

Each line department implementing the R&R programme has formed a project implementation cell in its respective departments to monitor and manage the programme.
**Malawi**

The Government has put in place:

* The Department of Disaster Preparedness, Relief and Rehabilitation with the aim of:
  a) making programmes to reduce poverty, which is the root cause of poor resource management and environmental degradation, which contributes to natural disasters
  b) developing disaster mitigation programmes
  c) responding to disasters by providing much needed resources to victims

* The Public Sector Investment Programme whose duty is to reduce poverty

* The Economic Planning and Development Department, which makes a deliberate move to include disaster and poverty issues in all its development programmes.

4. Does your government think that disaster risk reduction should be a) included in its relief and development plans and programmes b) a separate sector of government?

**Honduras**

The Municipality of Brus Laguna (BRL): It should form part of the local government. If it was separate, the municipality would lose leadership and motivation. The limitation is funding.

The Municipality of Puerto Lempira (PLP): Risk reduction should be included in the government’s plans and programmes, but – how would this be operated?

**India**

The government has realised that disaster management is not the responsibility of only one department but of all the sectors, organisations, agencies, community and individuals which can be affected by it. Occurrence of any disaster can severely disrupt the ongoing development programmes of government, and hence disaster management has to be a part of any developmental plan and programme.

Thus, the government has integrated disaster activities with development planning. All the departments like education, health, public infrastructure, roads and buildings have a role to play in disaster mitigation and preparedness.

5. Are your government’s disaster risk reduction programmes:

a) short term (up to one year)

b) medium term (up to five years)

c) long term (over 5 years)?
Malawi

They fit in all categories
a) short term (up to 1 year)
e.g. evacuation of people from lower areas in anticipation for floods

b) medium term (up to 5 years)
e.g. reforestation or small dam construction projects

c) long term (over 5 years)
e.g. making and implementing laws that would protect the environment, and
designing a national disaster management plan (currently under way).

6. What proportion of your government’s total development budget is spent on disaster risk reduction?

Honduras

The Municipality of Brus Laguna (BRL): There is no budget for this.

The Municipality of Juan Francisco Bulnes (JFB): Approximately 5 per cent (through the UMA).

The Municipality of Puerto Lempira (PLP): There is no budget – in the event of an emergency the municipal corporation meets to determine its response in co-ordination with other institutions.

India

It is difficult to estimate the proportion of Government total development budget spent on disaster risk reduction as provisions are made under different sectoral heads.

Malawi

... a very small percentage. The Department of Disaster Preparedness, Relief and Rehabilitation always includes in its budget three major components (operations) i.e. disaster preparedness, disaster mitigation, and disaster response. Although the Department makes a budgetary provision for risk reduction (mitigation), funds are not provided by the Treasury Department unless when disaster actually strikes (response).

7. What would cause your government to allocate more resources to disaster risk reduction?

Bangladesh

Bangladesh is a poor and small country. With 147,570 square kilometres, this country bears the burden of over 140 million population. Despite all of its development efforts, the country with its limited resources cannot fulfil the public requirements and has to depend on foreign loans, which are not so easy to get.
District Assemblies have been mandated to identify mitigation projects in their respective districts, some of which are since being attended to. Most of the Districts have come up with their mitigation projects but, due to unavailability of funds, the Department of Disaster Preparedness has not been able to attend to the projects, however, the projects are being ‘sold’ to interested NGOs.

India

The earthquake of 2001 has created a sense of urgency. The recently announced Disaster Management Policy and the proposed law will cause higher allocation of resources to Disaster Risk Reduction.

Malawi

There is already an Act of Parliament compelling the government to provide funds for disaster risk reduction but, due to a lack of understanding by the people in the Treasury, funds are not released for mitigation programmes. Also, financial constraints make the government attend to more pressing issues than disasters which have not yet happened.

8. Does your government believe disaster risk reduction is cost effective? If so, why?

Bangladesh

Of course, it is cost effective. The country faces average damages of US$820.12 million per year including a number of human lives, livestock, etc, and through this initiative, these sufferings have been reduced. Therefore, this programme is very essential for Bangladesh.

Honduras

The Municipality of Brus Laguna (BRL): It reduces the loss of property, goods and personal damage.

The Municipality of Juan Francisco Bulnes (JFB): It is cost effective – it improves production and city security.

The Municipality of Puerto Lempira (PLP): It increases availability of wood, improves the quantity and quality of water for human use, and improves harvests.

India

Disaster risk reduction is a cost-effective measure ... the amount spent on mitigation is far less than the loss incurred after a disaster. Moreover, this amount is spread over a long period of time and the cost per year for disaster reduction measures is sufficient enough to be financed from the budget. It will take some time for others to operationalise the idea.
**Malawi**

Yes:
* lives and property would be saved
* the amount spent on disaster response usually surpasses what would be spent on mitigation
* money spent on disaster response could be channelled to other development programmes
* disaster response creates a dependency syndrome with those people living in disaster prone areas.

9. **What influence does climate change have on your government’s relief and development planning?**

**Honduras**

Climate change is affecting sowing cycles.

**India**

Recent events of cold wave, heat wave, and failure of monsoon rains have created awareness and a sense of urgency. Concrete actions, other than those already in operation since two decades, are yet to emerge.