Managing Famine Risk

Linking Early Warning to Early Action

A Chatham House Report

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The Royal Institute of International Affairs
Chatham House
10 St James's Square
London SW1Y 4LE
T: +44 (0) 20 7957 5700
F: + 44 (0) 20 7957 5710
www.chathamhouse.org

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About the Authors

Lead author

Rob Bailey is a Senior Research Fellow of the Energy, Environment and Resources Department at Chatham House, focusing on food security. He previously held a number of posts at Oxfam GB, including Head of Economic Justice. In 2011, he was named as one of the DEVEX 40-under-40 leading thinkers on international development.

Contributing authors

The report draws heavily on the field research of Chatham House Africa Programme Associate Fellows Paul Melly and Jason Mosley in West Africa and East Africa respectively, and on the significant contributions to Chapter 6 of Robin Willoughby, Research Consultant (Food and Environmental Security) with the Energy, Environment and Resources Department at Chatham House.

Preface and Acknowledgments

This report is the final output of the Chatham House research project *Translating Famine Early Warning into Early Action*, led by the Energy, Environment and Resources Department. The project explored the barriers that hinder appropriate response to early warning of slow-onset food crises. The report builds on the author's earlier report *Famine Early Warning and Early Action: the Cost of Delay*, and on the findings of field research in West Africa and East Africa conducted by the Chatham House Africa Programme.

The challenges of preventing and responding to humanitarian crises, with scarce resources and in often near-impossible conditions, are immense. Although there is always the potential for improvement, this should not detract from the fact that the humanitarian system performs admirably. The purpose of this report is to identify problems and consider opportunities to address them. Inevitably this leads to a focus on things that are not working well, but the tone should be interpreted as constructive rather than critical.

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- *Translating Early Warning into Early Action: Response by Donors and Implementing Agencies*, Chatham House , 11–12 April 2012.
- *Translating Early Warning into Early Action: Response within Affected Countries*, Chatham House, 2 July 2012.

Acronyms and Abbreviations

3N	Nigeriens Nourish Nigeriens
ACTED	Agency for Technical Cooperation and Development
AGIR	Alliance Globale pour l'Initiative Résilience (Global Alliance for Resilience Initiative)
ALRMP	Arid Lands Resource Management Project
ARC	African Risk Capacity
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)
CAP	Consolidated appeals process
CAT	Catastrophe
CBA	Cost–benefit analysis
CBHA	Consortium of British Humanitarian Agencies
CCAA	Climate Change Adaptation in Africa
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CERF	Central Emergency Response Fund
CEWS	Community early warning system
CHAP	Common Humanitarian Action Plan
CHF	Common Humanitarian Fund
CIDA	Canadian International Development Agency
CIDCM	Center for International Development and Conflict Management
CILSS	Comité permanent Inter-Etats de Lutte contre la Sécheresse
DAC	Development Assistance Committee
DCM	Drought cycle management
DEC	Disasters Emergency Committee
DFID	Department for International Development
DMB	Disaster Management Bureau
DRC	Democratic Republic of Congo
DRR	Disaster Risk Reduction
ECHO	European Community Humanitarian Office
ECOWAS	Economic Community Of West African States
ERF	Emergency Response Fund
EWI	Early warning information
EWRD	Early Warning and Response Directorate
EWS	Early warning system
FAO	Food and Agriculture Organization of the United Nations
FEWSNET	Famine Early Warning System Network
FSNAU	Food Security and Nutrition Analysis Unit
FSNWG	Food Security and Nutrition Working Group
GDP	Gross domestic product
GFDRR	Global Facility for Disaster Reduction and Recovery
GHD	Good Humanitarian Donorship
GIEWS	Global Information and Early Warning System (Food and Agriculture Organization)
HDI	Human Development Index
HERR	Humanitarian Emergency Response Review
HEWS	Humanitarian Early Warning Service
HRD	Humanitarian Requirements Document
HRO	High reliability organization
IASC	Inter-Agency Standing Committee
ICT	Information and Communications Technology
IFRC	International Federation of Red Cross and Red Crescent Societies
IGAD	Inter-Governmental Authority for Development
ILRI	International Livestock Research Institute
IPC	Integrated Food Security Phase Classification
K4K	Kenyans for Kenya
KRCS	Kenyan Red Cross Society
LIC	Low-income country
Mt	Megatonne (million tonnes)
NASA	National Aeronautics and Space Administration

NDMA	National Drought Management Authority
NGO	Non-governmental organization
NOAA	National Oceanic and Atmospheric Administration
OCHA	Office for the Coordination of Humanitarian Affairs (United Nations)
OECD	Organisation for Economic Co-operation and Development
OIC	Organization of Islamic Cooperation
OTP	Outpatient Therapeutic Programme
PSNP	Productive Safety Net Programme
RRF	Rapid Response Facility
SAP	Système d'Alerte Précoce
SATCA	Sistema de Alerta Temprana para Centro America
SHARE	Supporting the Horn of Africa Resilience
SIDA	Swedish International Development Cooperation Agency
SME	Small and medium enterprise
SNNPR	Southern Nations, Nationalities and Peoples' Region
TFG	Transitional Federal Government
UAE	United Arab Emirates
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development
VAM	Vulnerability Analysis and Mapping (World Food Programme)
W&I	Warnings and indicators
WFP	World Food Programme (United Nations)

Executive Summary

Recurrent food crises are one of the principal impediments to development in the Horn and Sahel regions of Africa. In 2011, a drought-related emergency affected over 12 million people in the Horn – the fourth such event since the turn of the millennium. Precise numbers are unavailable, but estimates indicate that hundreds of thousands of people were displaced and tens of thousands more died. A year later, 18 million people were affected by a major crisis in the Sahel – the third to hit the region in eight years.

Food crises are slow-onset disasters. They emerge over a period of months and are routinely tracked and anticipated by famine early warning systems – specialist units that monitor and forecast risk factors such as food prices, health indicators, rainfall and crop production. These systems provide governments and humanitarian actors with the chance to take early action and prevent the situation from escalating into an emergency. Cost-benefit analyses indicate that, compared with emergency response, early action offers significant cost savings in the long run.

Yet all too often the link between early warning and early action fails and the opportunity to mitigate a gathering crisis is lost. This disconnect was starkly apparent in Somalia during 2010/11, when increasingly urgent early warnings accumulated for 11 months before famine was finally declared in July. Only after that did the humanitarian system mobilize.

Beginning with the failures that allowed the Somalia famine to take place and drawing on the recent history of other early warnings, this report considers in detail the various political, institutional and organizational barriers to translating early warning of famine into early action to avert it, and makes recommendations for how these can be overcome.

Key findings

1. Famine risk is well understood and badly managed

The spectre of famine has returned. Rapid population growth, low levels of political inclusion, low agricultural yields and rapid environmental change mean the risk of food crises in the Horn and Sahel is increasing. Conflict and geopolitics act as risk multipliers, meaning that full-blown famine remains a serious threat. The number of people affected by drought-related crises each year in the Horn and Sahel is on an upward trend. Humanitarian needs are increasingly going unmet despite increasing donor spend.

Food crises are not 'black swan' events. They occur regularly and their slow-onset pathology is well understood. They can be anticipated several months in advance, so are never unexpected. They are, however, devastating. It is reasonable to assume that between one and two million people have died in drought-related emergencies since 1970, the vast majority of these in the Horn and Sahel. As well as claiming lives, successive food crises erode assets and destroy livelihoods, trapping populations in a downward spiral of compounding shocks and increasing vulnerability.

Risk reduction efforts are not commensurate with the scale of risk. A threat of high likelihood and high severity, that is furthermore predictable and preventable, should be a constant focus for risk reduction measures. Yet responses to food crises are reactive, slow and fragmented.

2. Famine early warning does not lead to early action

Famine early warning systems have a good track record of predicting food crises but a poor track record of triggering early action. The long lead times offered by famine early warning systems provide the opportunity for decisive early action, but also the opportunity for prevarication, delay and buck-passing. This disconnect persists despite major improvements in the sophistication and capabilities of modern systems. Continuing technological and methodological advances mean the gap between early warning and early action is set to widen.

These 'delay dynamics' are magnified by a disparate collection of responders and deep accountability deficit. The users of early warnings are numerous and fragmented. They include at-risk populations, local authorities, national governments, national and international NGOs, UN agencies and donor governments. These have differing interests and priorities and weak lines of communication. Those with the greatest capacity to avert crisis are, at best, only weakly accountable to those at risk.

3. In the absence of strong accountability to vulnerable populations, governments do not give priority to humanitarian needs

Political risk trumps humanitarian risk. Aid policies and institutions are shaped by the risk preferences of donor governments, resulting in bureaucratic risk aversion and over-centralized and ponderous decision-making. In at-risk countries, governments may give lower priority to politically marginalized communities in spending and policy-making, thereby institutionalizing their vulnerability.

For donors and national governments delay is often a politically rational strategy. Donor governments may choose to delay action for a variety of reasons: if the affected country is unsupportive of their geopolitical agendas, if there is a risk they may be criticized for wasting taxpayers' money or that aid may be diverted to hostile groups, or simply because they expect that another donor will find the funds. National governments may suppress famine early warning if they are concerned it will challenge their record on hunger reduction, and may disregard early warnings of crisis among communities of low political value.

4. Changing the status quo requires that governments anticipate political reward from acting to reduce famine risk and expect to be penalized for failing to do so

Closer alignment of humanitarian and political risks would make governments more likely to respond to famine early warning and more likely to reform institutions and policies to enable early action.

Civil, political and media freedoms can help align humanitarian and political risks in affected countries. In addition, supporting the participation of vulnerable populations in decision-making and political processes, decentralized government, and national legislation to establish famine prevention measures and responsibilities in law may help increase government accountability to vulnerable populations.

For donor governments, closer alignment of humanitarian and political risk is likely to be piecemeal and incremental, but possible. NGO advocacy and campaigns can help tip the political calculus in favour of early action by rewarding those governments that provide early funding and criticizing those that delay. Reforms among donors to agree burden-sharing rules for early funding could increase mutual accountability. Donor governments can seek to manage the downside risks of early action by developing clear aid strategies that explain why early action is justified and seeking buy-in for these through their parliaments – similar approaches have been successful in helping donors manage the political risks associated with aid in fragile state for example.

Recommendations

Improve official early warning capacity and effectiveness

- Donors and national governments should invest in national famine early warning capacity, based on a comprehensive review of existing capabilities and needs in at-risk areas.
- They should also develop sustainable, multi-stakeholder models to strengthen and support famine early warning systems in poor countries, based on financial support from national government and donors, and technical support and capacity-building from early warnings providers and humanitarian agencies.
- Early warnings providers should explore opportunities to develop and deepen linkages between early warning systems – both vertically (community level to national level) and horizontally (across countries). For

example, a key strength of the Ethiopian national early warning system is its ability to draw on local-level data and cascade early warnings from national to regional and community levels.

- Early warnings providers should develop approaches to incorporate qualitative, informal early warnings from communities and networks into official analyses and decision-making. For example, the Climate Change Adaptation in Africa project has successfully integrated both traditional and scientific approaches to weather forecasting, resulting in more accurate forecasts and greater community acceptance.
- Donors, agencies and early warnings providers should develop a formal, independent process to reconcile differences swiftly between official early warning systems.

Enable vulnerable communities to take early action themselves

- Donors, agencies and national government should invest in community-based early warning systems and capacity-building, particularly in national contexts of low government capacity or where communities are politically marginalized.
- National and local governments should create an enabling environment for community-based early action by ensuring that policies and regulations support the response strategies of vulnerable groups.
- National governments, early warnings providers and agencies should develop innovative approaches to increase community access to official early warning information and tailor it to their specific needs.

Operational reform

- Agencies can reduce lead times and maximize their readiness for early action through a number of avenues. Lead times have been reduced from months to days by:
  - Undertaking regular preparedness audits to maintain optimal preparedness.
  - Developing response plans based on crisis calendars, which identify when during the timeline of a crisis particular interventions are appropriate and whether they can be delivered in time.
  - Reforming contingency planning into a more dynamic, fluid process in which plans are live documents that are continually revised as risk factors change.
- Agencies can optimize preparedness by maintaining a certain level of operational redundancy or spare capacity. This includes pre-positioning of emergency supplies in response to early warnings. For example, the World Food Programme's Forward Purchase Facility allowed it to establish a supply line to the Sahel six months before the peak of the 2012 crisis. Appropriate redundancy measures also include ongoing operational presence and greater staff continuity in at-risk areas.
- Agencies should develop 'early action platforms', building short-term emergency capacities into long-term development and social protection programmes which can adapt and scale up in response to early warning signals. Specialist humanitarian and development agencies should begin experimenting with joint programmes. Agencies with separate development and humanitarian divisions should develop organizational change plans to more closely integrate the two.
- As the primary providers of funds, donors can create the incentives for operational change. For example, they could:
  - Insist that agency response plans demonstrate interventions can be delivered in time.
  - Underwrite operational redundancy by funding advanced purchasing of emergency supplies (as donors such as Canada, Australia, New Zealand and Spain are doing) and long-term staff contracts in at-risk areas.
  - Encourage closer integration of humanitarian and development work by bringing humanitarian and development funding decision-making closer together (as Spain, and the United States are attempting to do), experimenting with joint humanitarian/development strategies with common goals and objectives, and earmarking funding for integrated projects or programmes.

- Foster cooperation between agencies by favouring joint programmes and proposals, funding inter-agency response analysis and agreeing transparent and objective funding criteria that clarify when particular interventions are warranted.

Funding reform

- Donors should expand and deepen the use of instruments to increase flexibility and speed up access to funding, such as rapid response funding mechanisms – used by donors such as Sweden, Spain and the United Kingdom – with fast-track decision-making and disbursal processes, contingency funds, increasing use of untied aid, and greater use of multi-year humanitarian funding and long-term humanitarian partnership agreements such as those being explored by Denmark, Australia, Spain and Sweden.
- Pooled funds should clarify guidance for early funding; where necessary new criteria should be introduced to encourage agencies to seek early funding from these sources.
- Donors, governments and agencies should explore innovative risk-financing arrangements that can provide rapid, early financing in isolation from political considerations. A major opportunity is the African Risk Capacity initiative, which would allow governments to access early funding based on rainfall indices, and reduce costs by pooling drought risk across the entire continent.

Institutional reform

- Donors and agencies should adopt risk management strategies that identify risks, explain the rationale for assuming risk and show how early warning and early action are central to risk management.
- They should also ensure the creation of incentives for appropriate risk-taking and, equally importantly, the removal of disincentives, for example by providing institutional cover to decision-makers.
- Clear processes for triggering, escalating, recording and justifying decisions, whether they are to respond or not, should be formalized within organizations.
- Where the capacity exists to do so, decision-making should be decentralized.

Test new approaches in 'resilience labs'

Resilience labs should be developed in partnership between national governments, donors, agencies and early warnings providers to test new approaches and demonstrate success. Root-and-branch reforms of the kind called for in this report will be easier to justify if they have been tested and shown to work. These partnerships would develop joint long-term, flexible programmes in vulnerable regions designed to respond to early warnings.

1. Introduction

'Every day of delay in assistance is literally a matter of life and death for children and their families.'

Mark Bowden, UN Humanitarian Coordinator for Somalia during the 2011 famine[1]

'We have learned some lessons from the Horn of Africa. While we can't prevent drought, we can prevent famine.'

Josette Sheeran, Executive Director of the World Food Programme during the 2011 famine[2]

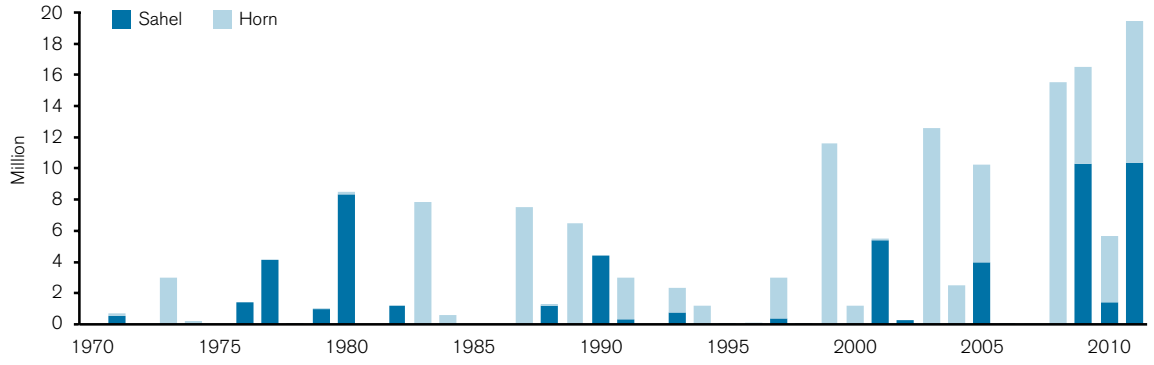
'Not again.'

Mark Malloch-Brown, former UNDP Administrator, United Nations Deputy Secretary General and UK Minister of State for Africa, Asia and the United Nations[3]

In 2011, a major food crisis affected over 12 million people in the Horn of Africa, culminating in the declaration of famine in Somalia. In the following year, over 18 million people were affected by a second food crisis engulfing large areas of the Sahel. These events were not anomalies. It was the third crisis to hit the Sahel in eight years. There have been four major food crises in the Horn since 2000.

The roots of these disasters lie in complex underlying social, political, economic and environmental factors, but drought usually provides the final push that tips populations over the edge. Of all the natural hazards, droughts are the biggest killer.[4] Although data are invariably patchy, it is reasonable to suppose that between one and two million people have died in drought-related disasters worldwide since 1970.[5] Where drought collides with conflict, mortality can be particularly catastrophic. Nearly all of these deaths occurred in the arid and semi-arid regions of the Sahel and the Horn of Africa where the numbers of people affected by successive crises appears to be on an upward trend (Figure 1.1). A table of mortality estimates from drought-related disasters is provided in Appendix B.

Figure 1.1: Millions of people affected by drought in the Horn and Sahel



Source: CRED. Sahel taken to include the western countries of Cameroon, Chad, the Gabon, Mali, Mauritania, Niger and Senegal. The Horn taken to include Djibouti, Ethiopia, Kenya and Somalia.
Note: These data should be treated with caution. Specific problems include the challenges of estimating numbers of people affected and issues of reporting, particularly in earlier years. There also appear to be some issues with bucketing of data to particular years, probably because the drought and the disaster may actually occur in successive years. Data adjusted for Kenya in 1999 to remove an anomalous figure of 23m affected. This was replaced with an estimate of 4.4m from press reporting.

1 Bowden (2011).
2 Sheeran (2012).
3 Malloch-Brown (2011).
4 World Bank (2010).
5 World Bank (2010) estimates one million drought-related deaths in Africa alone. Devereux (2000) estimates between 1,571,000 and 2,481,000, including drought-related complex emergencies. The EM-DAT database estimates 677,621 although does not include data for a number of major famines.

Apparent declines in drought-related deaths over the last two decades should be welcomed with caution. The drought mortality risk distribution has a long tail, characterized by infrequent, but catastrophic events[6] – the last such example being the 1984 famine in Ethiopia. This means that long timescales are needed to discern trends. The threat of full-blown famine remains, as demonstrated by the catastrophe in Somalia during 2011.

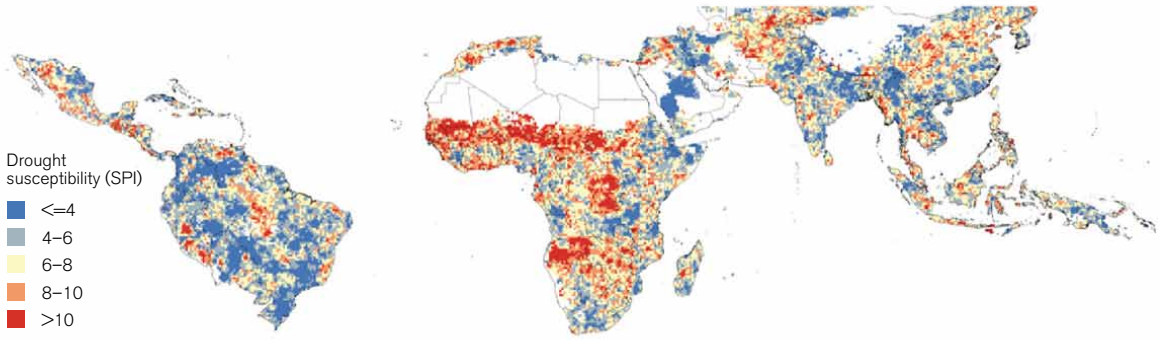
1.1 Vulnerability to drought

Susceptibility to drought is not confined to the Horn and the Sahel (Figure 1.2), but vulnerability to drought is most extreme in these regions owing to a variety of social, political, economic and environmental factors (see Figure 1.3), including:

- high rates of poverty and chronic malnutrition;
- poor access to health care and basic services;
- high dependency on low-productivity, rainfed agriculture;
- high risk of conflict;
- high rates of environmental degradation;
- weak accountability of government;
- political marginalization of vulnerable groups.

High vulnerability in these regions means that drought easily translates to humanitarian crisis. The 2011 Horn of Africa emergency was triggered by the worst drought in six decades. A year later, the US Midwest – the country's breadbasket – also experienced its worst drought in six decades, hitting maize and soybean harvests and triggering sharp increases in international food prices. No humanitarian emergency followed in the United States, however. Its high levels of development and wealth meant it was able to cope with the shock and recover. The farmers – a politically powerful constituency in the US – were protected from the drought by a generous system of federal subsidies and insurance that actually saw farms post record profits despite the harvest losses.[7] The situation was very different in the Horn, where people in rural areas are often politically weak and extremely poor and have little in the way of welfare to support them. The drought devastated crops and livestock, undermining livelihoods and leaving families destitute. It also contributed to sharp increases in local food prices, making food unaffordable for millions. For certain politically marginalized populations and regions, the response of government was sluggish. Once the emergency had passed, these people were left more vulnerable to the next drought, their health weakened, assets exhausted and livelihoods eroded.

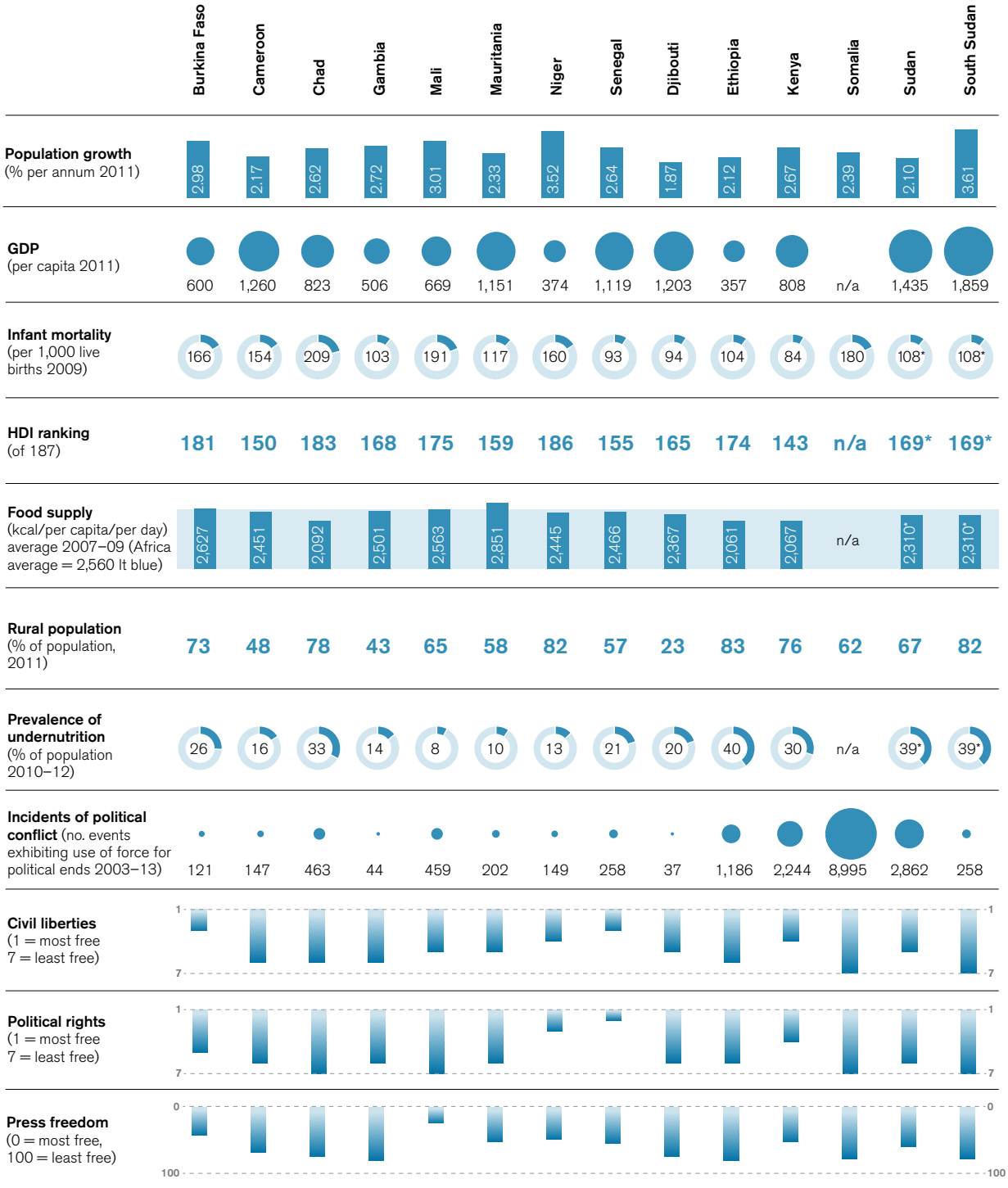
Figure 1.2: Map of drought susceptibility



Source: Ericksen et al. (2011); UNEP, GRIDA-Arendal (2011).
Note: SPI (standardized precipitation index) defined as the average number of droughts per year per pixel for the period 1974–2004. Drought defined as three consecutive months with less than 50 per cent precipitation as compared to average.

6 Foresight (2012).
7 Meyer (2012).

Figure 1.3: Underlying drivers of vulnerability in the Horn and Sahel



Sources: World Bank Development Indicators; UNDP (2011); FAO (2012a); FAO (2012b); Freedom House (2012); Freedom House (2013); Robert S Strauss Center (2013).

*Data show the former Sudan where disaggregated data are unavailable.

Notes: Incidents of political conflict provide a proxy indicator of political instability and conflict from 2003 to 2013 by illustrating the number of events that exhibit characteristics of political violence, such as riots/protests, violence against civilians, battles for territory or land, and non-violent activity by a conflict actor.

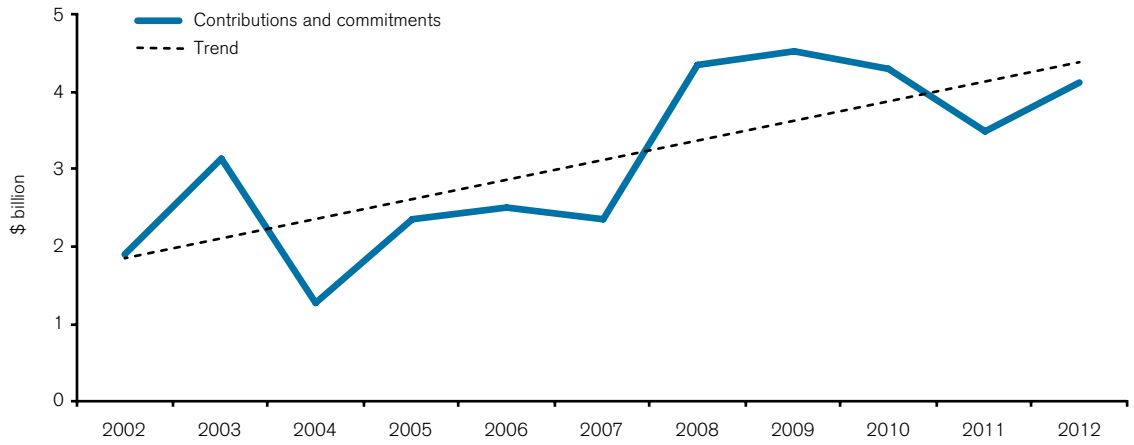
Political rights measured through evaluation of electoral process, political pluralism and participation and functioning of government. Civil liberties assessment based on freedom of expression and belief, associating and organization rights, rule of law, and personal autonomy and individual rights.

1.2 The cost of response

The cost of responding to food crises and drought-related emergencies is significant and rising. Total donor contributions to the World Food Programme (WFP) increased from $1.9 billion in 2002 to $4.12 billion in 2012 – more than doubling in the period (Figure 1.4).[8]

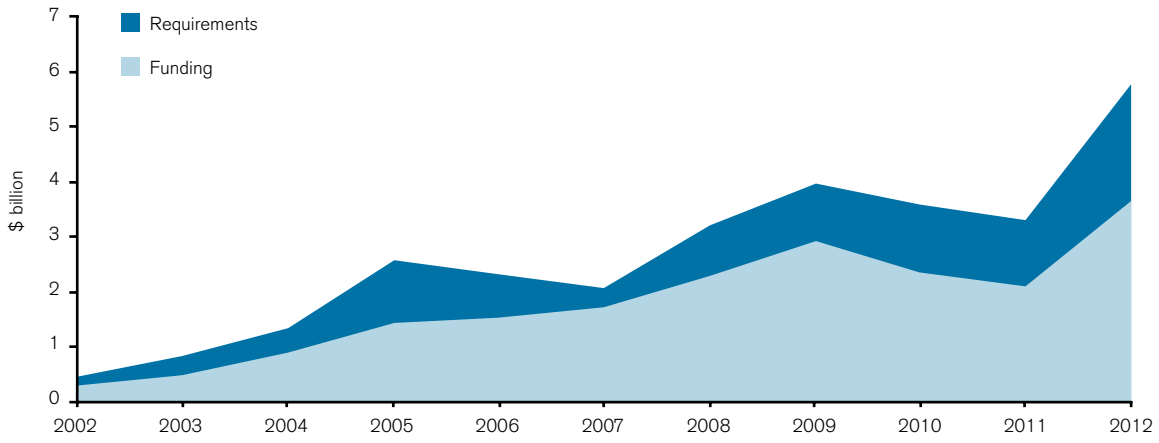
In the Horn and Sahel, rising donor spending in response to successive crises still struggles to keep pace with demand. The gap between humanitarian requirements and actual funding is widening: unmet financial requirements for UN consolidated and flash appeals in the Horn and Sahel increased from nearly $130 million in 2002 to over $2.1 billion in 2012 (Figure 1.5).[9]

Figure 1.4: Contributions and commitments to the World Food Programme, 2002–12



Source: OCHA Financial Tracking Service (FTS). Available at http://fts.unocha.org/pageloader.aspx?page=emerg-globalOverview&Year=2012.

Figure 1.5: Funding of UN consolidated and flash appeals in the Horn and Sahel



Source: OCHA Financial Tracking Service (FTS). Available at http://fts.unocha.org/pageloader.aspx?page=emerg-globalOverview&Year=2012.

8 OCHA Financial Tracking Service (FTS), Global Humanitarian Contributions per Appealing Agency, http://fts.unocha.org/pageloader.aspx?page=emerg-globalOverview&Year=2012.

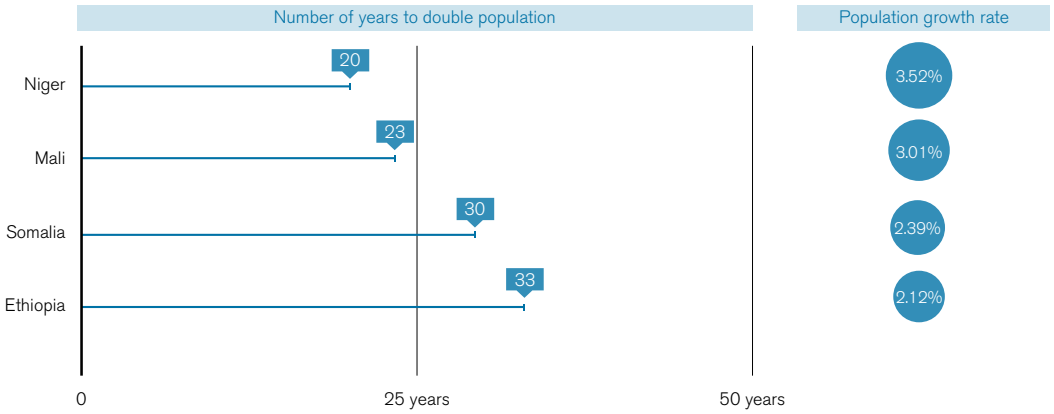
9 Ibid.

1.3 Increasing risk

A number of environmental, demographic and security trends suggest that the humanitarian system will continue to struggle to meet needs in the Horn and Sahel, despite strong economic growth in many of the countries. Countries in the Horn and Sahel have some of the highest population growth rates in the world. The population of Niger increased by 42 per cent from 2001 to 2011, and the population of Kenya by 30 per cent in the same period. Other countries in the region such as Ethiopia and Somalia have similar growth trends.[10] Moreover, these growing populations are beginning to age, increasing vulnerability as they do so.

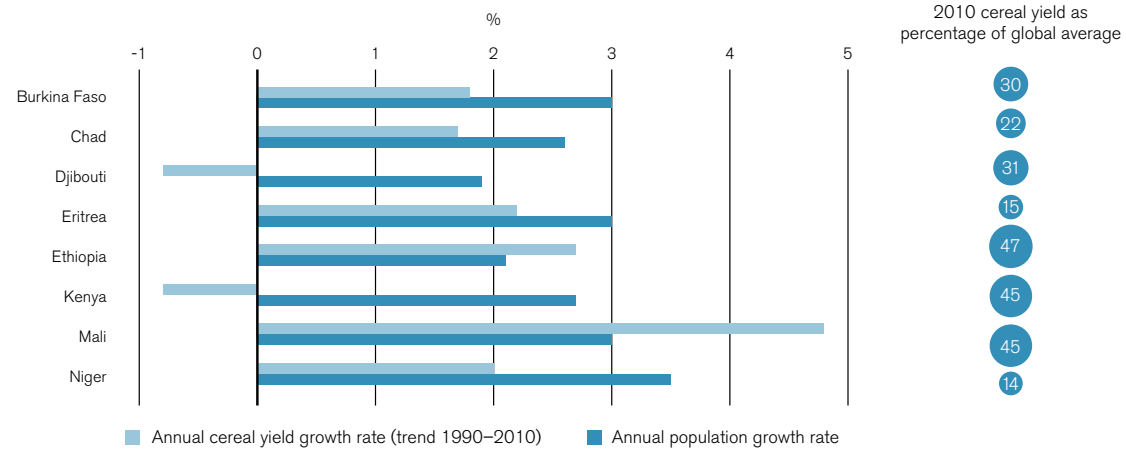
Water scarcity and soil degradation compound these challenges. Agriculture is overwhelmingly rainfed, making food production highly dependent on erratic and often declining rainfall. Countries including Djibouti, Somalia, Mali, Niger and areas of northern Kenya receive less than 290mm of precipitation a year – below sufficient levels for sustainable rainfed agriculture.[11] Consequently, in many countries yields are not keeping pace with population growth (Figure 1.7).

Figure 1.6: Time taken to double population size in selected Sahel and Horn countries



Source: World Bank Development Indicators, http://data.worldbank.org/data-catalog/world-development-indicators.

Figure 1.7: Cereal yield and population growth rates for selected Sahel and Horn countries



Source: World Bank Development Indicators, http://data.worldbank.org/data-catalog/world-development-indicators.

10 Data from the World Bank Development Indicators, http://data.worldbank.org/indicator. Figures show that the population of Kenya increased from 32.1 to 41.6 million from 2001 to 2011 (30%) while the populations of Ethiopia, Somalia and Niger grew from 67.3 to 84.7 million (25%), 7.6 to 9.6 million (26%) and 11.3 to 16.1 million (42%) respectively in the same time frame.

11 UNEP (2010).

Long-term rainfall trends are troubling. In the Sahel, rainfall patterns tend to follow a supercycle, with multi-decadal drying and recovery spells. In Niger, over the last 20 years summer rains have almost recovered following the previous dry spell, which ended in the 1980s, though year on year, rainfall remains erratic.[12] In Burkina Faso, recovery stalled in the early 2000s and rainfall has plateaued at 15 per cent below the average of the previous wet spell, from 1920 to 1969.[13] A similar picture is found in Mali, where rainfall has flatlined 12 per cent below the 1920–69 average.[14] In Chad, the recovery not only stalled but went into reverse.[15]

Many areas of the Horn are experiencing long-term declines in rainfall. Southwestern Ethiopia has been on a downward trend since the 1960s.[16] Across southern, southwestern and southeastern Ethiopia, growing season rainfall has declined by 15 to 20 per cent since the 1970s, with impacts further exacerbated by significant warming.[17] A similar pattern of decreasing rainfall and rising temperatures is evident in Kenya, where long rains have declined by 100mm since the mid-1970s in the areas of central Kenya that are critical for growing surplus crops.[18]

Rainfall in the Horn and Sahel is inherently unpredictable and there is considerable uncertainty about how climate change will affect rainfall trends in the future. However, the long-term decline in 'long rains' precipitation in the Horn of Africa has been linked to anthropogenic warming, indicating that the 2011 drought is attributable to climate change and suggesting increasingly arid conditions and more frequent droughts as climate change gathers pace.[19] The westernmost countries of the Sahel, notably Mauritania, Mali, the Gabon and Senegal, are also expected to see a reduction in precipitation.[20] There are likely to be variations at the subnational level. For example, most climate models predict an increase in rainfall around the Ethiopian highlands.[21] The uncertainty about climate change and its future impact across the Horn and Sahel makes anticipatory adaptation a high-risk endeavour.

There is greater certainty about future temperature trends. Climate models forecast significant average temperature rises, greater than those predicted for global average temperatures, and more pronounced and frequent extremes, meaning extremely hot seasons will become more common in the future.[22] The hotter climate will increase evapotranspiration, offsetting increases in rainfall where these occur; increasing maximum daily temperatures and consecutive numbers of very hot days will reduce crop yields and forage.

The threat of conflict and instability – major risk multipliers for famine – remains significant in both the Horn and the Sahel, and may increase as climate change and population growth exacerbate resource scarcities. Somalia, Sudan, South Sudan, Chad, Nigeria, Kenya, Ethiopia and Niger all feature in the top 20 of the Fund for Peace's 2012 Failed States Index, for example.[23] Mali, notable by its absence from this list, has subsequently collapsed and descended into war between Jihadist insurgents and international and regional forces.

Underlying social and political divisions in many countries, often along ethnic or religious lines, not only increase the risk of conflict but also perpetuate the marginalization of certain groups, increasing their vulnerability to drought and reducing the responsiveness of government to their humanitarian needs.

1.4 The opportunity of early warning

The risks posed by drought in the Horn and Sahel are increasing, but so is the capacity to manage these risks. Modern famine early warning systems (EWS) provide

12 Funk et al. (2012a)
13 Funk et al. (2012b)
14 Funk et al. (2012c).
15 Funk et al. (2012d).
16 Funk et al. (2005).
17 Funk et al. (2012e).
18 FEWSNET and USGS (2010).
19 Funk (2012).
20 Buontempo (2010).
21 Ibid.
22 Buontempo (2010); IPCC (2012).
23 See 2012 Failed States Index, available at http://www.fundforpeace.org/global/?q=fsi-grid2012 [accessed on 29 January 2013].

those best placed within the humanitarian system (governments, donors, humanitarian agencies, local organizations and vulnerable communities themselves) with the opportunity to anticipate crises and take early action to mitigate the impacts. Drought-related emergencies are now essentially predictable and preventable.

The major opportunity presented by EWS has, however, proved perplexingly hard to seize. Numerous EWS were established during the 1980s, including USAID's Famine Early Warning System Network (FEWSNET) and multiple national systems throughout the Horn and Sahel, amid major expectations of a new era of famine early warning and prevention. But by the 1990s it had become clear that while the ability of governments and the humanitarian system to predict food crises had improved dramatically, this had not delivered a comparable improvement in crisis prevention.[24]

Since then, continued improvements in technology and the science of early warning have seen the gap between successful prediction and prevention continue to widen. Evaluations of responses to food crises in the Horn and Sahel commonly identify the failure to respond to early warnings as a shortcoming. The 2011 crisis in the Horn provided a particularly egregious example, with national governments, donors and humanitarian agencies all demonstrating remarkable inertia in the face of escalating early warnings. This culminated in the failure to prevent famine in Somalia despite some of the most comprehensive and authoritative early warnings ever provided.[25]

For a period after the Somalia famine, the disconnect between early warning and early action was high on the agendas of donors and humanitarian agencies, helping to facilitate a comparatively swift response to early warnings of a food crisis in the Sahel a year later. However, the priority afforded the issue in 2012 resulted primarily from a collective sense of shame at the previous year's failure. Fundamental issues remain unaddressed.

Early action also resonates with an increasing focus within the humanitarian and development spheres on the concept of 'resilience', which commonly emphasizes the capacity to anticipate, absorb and recover from shocks or stresses. As such, early warning and early action are fundamental to drought resilience, and improving the link between the two should be central to attempts to build resilience in the Horn and Sahel.

Resilience, and therefore early warning and early action, is also central to ongoing discussions to agree new international frameworks, specifically the post-2015 agenda to replace the Millennium Development Goals, and the post-2015 framework for Disaster Risk Reduction (DRR) to replace the Hyogo framework. With a Global Humanitarian Summit, the first of its kind, now proposed for 2015, there are numerous opportunities on the horizon to achieve international progress on early warning and early action.

This report considers the experience of famine early warning to date. It makes specific recommendations for how enabling conditions for early action can be created. As such, it should contribute to the international discussions on resilience and DRR and provide a resource to help governments, donors and agencies undertake the reforms needed.

It draws on extensive interviews with experts from national governments, NGOs, UN agencies, donor agencies, academics and early warnings providers, two workshops held at Chatham House, and field research conducted in East Africa and West Africa. A list of organizations with staff interviewed for this research is provided in Appendix A.

Chapter 2 introduces famine EWS and explores a number of issues related to their design and institutional setting. Chapters 3 and 4 consider the enabling conditions for early action within affected countries and the international system respectively. In particular, these chapters examine the political logic of delay, found to be the primary barrier to early action and also the principal determinant of other important institutional and organizational constraints. Chapter 5 explores the importance of appropriate risk management and the relevance of the resilience agenda. Chapter 6 then considers the implications of this for funding early action. Chapter 7 offers conclusions and recommendations.

24 Buchanan-Smith and Davies (1995).

25 Note that the challenging operating environment and lack of humanitarian access in Somalia made it impossible to fully mitigate the impacts of the 2011 drought. Nevertheless, far more could have been done to prevent the crisis escalating to a full-blown famine.

2. Famine Early Warning Systems

Key messages

- Famine is the culmination of a well-understood process that can be followed and to a considerable extent anticipated. This process begins with a particular shock or stress such as drought, precipitating a livelihood crisis that may eventually lead to a humanitarian emergency.
- Famine EWS allow for this process to be monitored and forecast, so that early action can be undertaken to protect lives and livelihoods and prevent the crisis from escalating.
- Famine EWS can be developed at international, regional, national or community levels to meet the different needs of national governments, donors, agencies and vulnerable communities.
- Famine early warning information (EWI) is a public good. Access to EWI should be maximized. This requires careful consideration of all potential users and their informational needs, particularly those of vulnerable communities.
- Early warning is a necessary but not sufficient condition for early action. The institutional context in which an EWS is located determines how information is used and by whom. Key factors include ownership of the EWS and the extent to which it is embedded within a wider decision-making system.

To the extent that particular disasters can be forecast or anticipated, it is possible to provide advance warning to key stakeholders such as at-risk populations, governments or humanitarian organizations, in order that they can take appropriate early action to minimize losses. This is the role of an EWS. The precise form of an EWS will depend upon a variety of factors including the data environment, the communication infrastructure, intended users and the nature of the hazard. Nevertheless, all EWS – for famines or other hazards – have some common elements: they collect early warning data, analyse it to produce early warning information (EWI) and communicate this to decision-makers (see Figure 2.1).

Data Collection refers to the process by which the early warning data are gathered and collated. Important considerations include the appropriateness, timeliness and reliability of the data.

Analysis & Forecasting refers to the technical activities of monitoring and generating EWI. Important considerations include the parameters monitored, the methodology employed, the specific variables forecast and the level of confidence that may be attached to these forecasts.

Dissemination & Communication refers to the provision of EWI to relevant stakeholders. Key considerations relate to the channels through which warnings are disseminated, the stakeholders to which warnings are communicated and the format in which EWI is presented.

A fundamental tension within many EWS exists between timeliness and confidence. Inevitably, confidence in the accuracy of EWI will increase with time as more data are gathered and analysed, while the amount of warning time available will decrease. A second fundamental tension

Figure 2.1: Elements of early warning

Box 2.1: Examples of successful EWS

Early warning for tornadoes in the US

The US has more tornadoes than anywhere in the world. Compared with large oceanic storms such as hurricanes and cyclones, tornadoes are extremely localized, rapid-onset and harder to anticipate. The destructive power of a tornado means that early warning is often the difference between life and death for those in its path. In 1989, the introduction of EWS based on Doppler radar saw the percentage of tornadoes warned for increase from 35 to 60 per cent, and warning lead time rise from 5.3 minutes to 9.5 minutes. These improvements meant that the rate of fatalities caused by tornadoes declined by 45 per cent over the 1990s, saving an estimated 79 lives a year.

Mozambique floods and community-based EWS

Following the dramatic Mozambique flooding in 2000, an effective community-based EWS was established by the government with the help of NGOs and the Red Cross. This was linked to early action plans to prevent the same level of destruction when flooding hit again in 2007 and 2008. Its success lies in effectively linking community-based EWS to national and global weather forecasting of floods and cyclones, allowing people the time to evacuate or find shelter before disaster strikes.

Communities have been taught to monitor simple variables for warning signs. For example, those downstream watch the river colour and debris to judge the magnitude of potential floods, while others study animal behaviour. Radios are used to relay EWI and are credited with dramatically increasing access to official early warnings.

Central America Hurricane EWS

WFP's SATCA (*Sistema de Alerta Temprana para Centro America* or Early Warning System for Central America) collates multi-hazard early warning data from over a dozen leading scientific organizations, national governments, donors and other international organizations.

Using SATCA, WFP was able to monitor the formation of hurricanes around Haiti during the 2012 hurricane season. Hurricane trajectories were plotted with a four-day lead time, allowing WFP to coordinate with the government to source food and prepare supply lines to at-risk areas. WFP has used the system to prepare for, and respond to, hurricanes, droughts, earthquakes, floods and volcanic eruptions in Cuba, Mexico, Belize and Panama, among others.

Sources: NSSL (2012); World Bank (2009); UNISDR (2006); IFRC (2009); WFP (2009).

relates to the richness of EWI. Providing stakeholders with as much EWI as possible should help them make better-informed decisions. However, in practice this is often not the case; stakeholders may lack the capacity to properly interpret the information, with the result that the key message is lost.

The value of well-designed EWS can be profound, as demonstrated by numerous examples from developed and developing countries alike (see Box 2.1).

2.1 Famine early warning systems

The amount of advance warning provided by a particular EWS is heavily dependent on the nature of the hazard. EWS may provide lead times of a few seconds for earthquakes, minutes for tornadoes, hours for tsunamis and days for floods and hurricanes. The length of lead time obviously determines the extent of possible action. In the event of an earthquake warning, all that may be possible

is for people to gather under door frames. Tornado warnings can provide enough time for people to evacuate the area. Hurricane warnings may allow enough notice for people to both evacuate and take measures to protect assets.

2.1.1 The famine process

In the case of food crises, lead times are longer. Disasters such as those that periodically hit the Sahel and Horn of Africa are widely referred to as slow-onset disasters. These tend to follow a particular chronology beginning

Box 2.2: The early warning paradox

An important performance measure for any EWS is the length of lead time it is able to provide. The more time that decision-makers or at-risk groups are provided with, then the greater the opportunity for early action. However, longer lead times also provide the opportunity for prevarication, delay and buck-passing. Paradoxically, earlier warning does not necessarily lead to earlier action.

An element of this can be attributed to a greater sense of urgency when lead times are short. For example, for rapid-onset disasters such as tornadoes, a decision must be made within a matter of minutes. There is no opportunity to 'kick the can down the line'. The decision is essentially binary – stay or go – and the risks associated with each option are clear and easy to consider: in any rational calculation, the downside risks of staying put will exceed the downside risks of evacuation, likely to be no more than a minor inconvenience in the event that the tornado misses.

Another important factor is the question of how the burden of responsibility for action is shared. Where responsibility for action is diffuse, delay is more likely as decisions must be agreed collectively. This will be complicated where actors have differing interests and incentives or when the costs and benefits of action or inaction are distributed unevenly. This can be seen in the case of climate change, where initial lead times for early action were on the decadal scale, yet – despite increasing scientific certainty and a strong economic case for early action – the international response has been weak and the goal of limiting warming to below 2°C now looks almost impossible. In many respects, progress on climate change has been hamstrung by a perfect storm of inhibiting conditions for early action:

- Early action requires a collective response across a diverse range of governments with differing agendas, interests and vulnerabilities to climate change.
- Generally speaking, those countries with the most capacity for early action (richer, high-emitting countries) are not those most at risk.
- Conversely, those most at risk from climate change have the least capacity to undertake mitigation. This is true geographically (poor, low-emitting countries) and temporally (future generations). There is a significant accountability deficit.
- In the context of long lead times before the benefits of action or the costs of inaction become apparent, these conditions lead to paralysis.

Many of these issues are apparent with famine early warning, where, compared with most natural hazards, lead times are very long. Responses often depend upon many different actors including governments with divergent interests and priorities. Response decisions are not binary, but require a great deal of planning and negotiation. Early funding suffers from a collective action problem, and there is often an accountability deficit, whereby those with the greatest capacity to provide early assistance – typically national governments or donor governments – are at best weakly accountable to at-risk populations. These issues will be explored in later chapters.

with successive failed rains leading to poor harvests and pasture. In the absence of adequate or accessible food reserves, this leaves communities facing a 'hunger gap': the period until the next harvest during which people adopt coping strategies such as foraging for wild foods, forgoing meals or selling assets – often livestock – to purchase grain. This can trigger precipitous declines in the terms of trade for affected households, as prices for food are bid up at the same time as livestock markets are flooded by distressed sales of weakened livestock. A similar deterioration in the terms of trade between food and labour is also common, as affected communities seek alternative income streams en masse. As the situation becomes increasingly desperate, migration begins, with people moving in search of assistance, often massing at refugee camps.

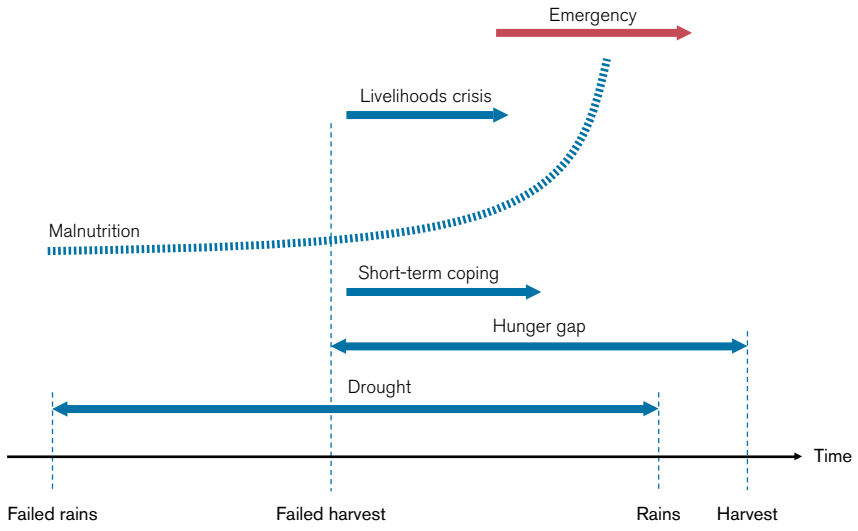
The timeline described above is, of course, a generalization. No two food crises are the same. Crop failure can be due to locust infestations rather than failed rains. Where there is war or conflict, food crises are likely to be more severe. Where markets are reasonably well connected, international or regional food prices are likely to be important factors in shaping the course of the crisis. Different socioeconomic groups may experience different impacts depending on how particular areas and livelihood strategies are affected. For example, in the case of the 2011 famine in Somalia, the worst-affected households tended to be in agropastoralist zones where food insecurity was associated with sharp declines in the terms of trade for livestock and labour;[26] the 1984 Ethiopian famine was concentrated among the farming populations of the northern highlands. Finally, political factors can be important in shaping how government response varies across regional, ethnic or religious lines, with important implications for how different groups are affected.

Nevertheless, it is clear that famine is the culmination of a process that can be followed and to some considerable extent anticipated. The following related observations are important:

1. Famine itself is an event

Although it is the culmination of a gradual process, the emergency itself (or acute phase) is a relatively rapid-onset event. Malnutrition prevalence and mortality rates typically deteriorate suddenly as populations reach a 'tipping point' where coping strategies are exhausted. Sharp increases in mortality may be associated with disease and poor sanitation, particularly as refugees gather in densely populated camps.[27]

Figure 2.2: Illustrative famine timeline



26 Salma et al. (2012).
27 de Waal (1989).

2. A livelihood crisis does not always lead to a humanitarian emergency

The point at which populations are forced to abandon normal livelihood strategies and adopt short-term coping strategies may be considered the beginning of a livelihood crisis. In the event that coping strategies are unable to prevent significant deteriorations in mortality and malnutrition, then a humanitarian emergency will follow, as outlined above. However, this is not inevitable, and coping strategies may allow populations to navigate the hunger gap without tipping into an acute phase.

3. Livelihood crises increase vulnerability and make emergencies more likely in the long run

Short-term coping strategies offer improved access to food in the immediate term, but usually at the cost of long-term prospects. A pastoralist family that sells off cattle in order to buy food will see its asset base decline. A farming family that sells off seeds, tools or land, or takes on debt, will be less able to provide for itself in the future. In each case, the result is households that are poorer and more vulnerable to the next crisis.

4. Livelihood crises and humanitarian emergencies require different interventions

During a livelihood crisis, the response should aim to prevent the situation deteriorating into a humanitarian emergency and limit the erosion of livelihoods and assets. This requires interventions tailored to the particular livelihood and coping strategies of the affected populations. For example, appropriate interventions to mitigate a pastoralist livelihood crisis might include commercial destocking, water point rehabilitation, fodder distribution and the provision of veterinary care. In a humanitarian emergency these interventions are too late; more appropriate interventions might include food distributions or, where markets are functioning, cash distributions, alongside emergency infant nutrition programmes and health care.

The ideal famine EWS should therefore be able to anticipate both livelihood crises and humanitarian emergencies and recognize them as different phases of the same process. By monitoring key risk factors such as weather, harvest data and market data alongside household economic data it should identify livelihood stresses and shocks. This in turn should inform interventions to shore up livelihoods and avoid destructive coping strategies. EWS should detect whether the crisis looks likely to evolve into a full-blown emergency, allowing actors to prepare for a humanitarian response. At each stage of the process, early action should seek to prevent the crisis escalating and mitigate the impacts on lives and livelihoods. Crisis calendars provide a means to identify when particular interventions are most appropriate (see Box 2.3).

Box 2.3: Designing a response using a crisis calendar

A number of evaluations of previous food crisis responses in the Horn have revealed agencies responding so late as to appear 'ridiculous': delivering fodder when pastures were recovering or distributing seeds after rains have passed. Researchers found that the primary explanation for this lateness was the simple failure among agencies to design their responses according to when particular interventions are appropriate and whether they can be delivered in time. Crisis calendars provide a means to do so. This approach sets out the expected timeline of a crisis by plotting the seasonal calendar and the livelihood and coping strategies people will adopt. Specifically, it identifies windows of opportunity when particular interventions are needed to protect livelihoods and avoid destructive coping strategies. For example, seeds must be distributed so that they can be sown in time for rain; fodder should be distributed when pasture is scarce.

Comparing the window of opportunity for a particular intervention with its lead time makes it possible to identify whether or not the intervention can be delivered in time. Where lead times are long, it often means that by the point at which a decision to respond has been taken, it is already too late. In these cases, agencies need to focus on shortening lead times through preparedness measures.

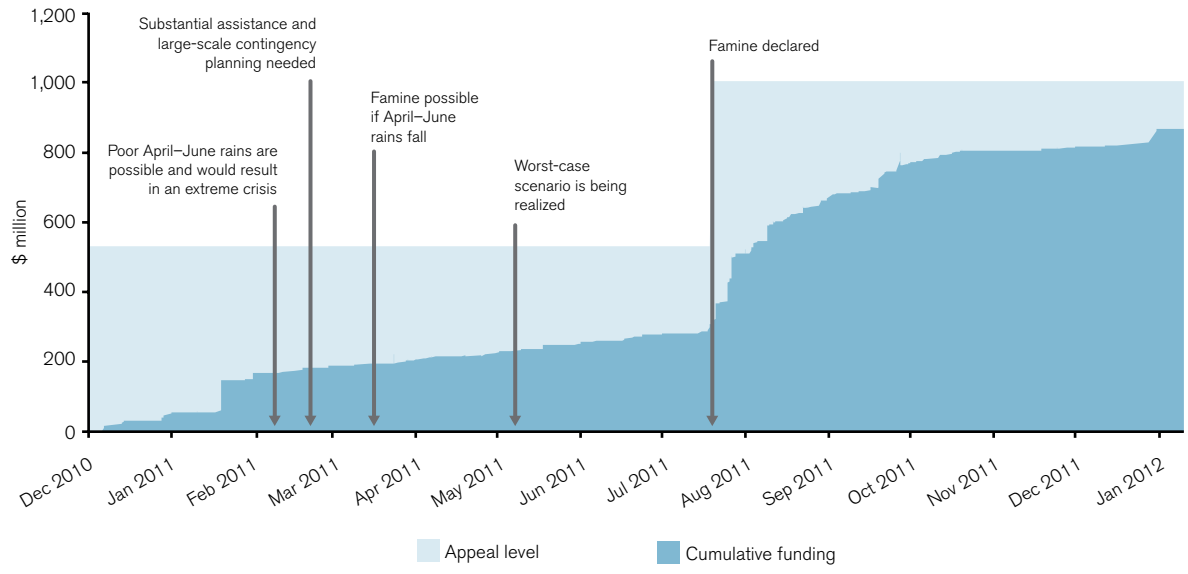
Source: Levine et al. (2011).

One of the principal challenges for famine EWS is pinpointing when the crucial 'tipping point' from livelihood crisis into emergency is likely. In regions of chronic food and nutrition insecurity and frequent drought, it can be difficult to distinguish between 'normal' years and 'bad' years when extreme deteriorations in development and health indicators are likely. For example, millions of people in the Sahel live in what might be described as a state of permanent crisis. Appalling levels of child malnutrition are structural: malnutrition among under-fives is persistently above crisis thresholds in many regions; an estimated 226,000 children die of malnutrition-related causes each year.[28] Extreme poverty is widespread, and livelihoods are highly exposed to droughts, the cumulative impact of which is a downward spiral of compounding shocks and increasing vulnerability. One recent survey of two regions in Niger found many households struggling to cope with the consequences of a poor harvest in 2011 while yet to recover from previous food crises in 2005 and 2010.[29] When the situation is so precarious, anticipating the next emergency or tipping point is by no means straightforward. This was most recently illustrated by protracted debates between early warnings providers, donors and humanitarian agencies about the likely severity of the 2012 crisis (see Box 4.1).

The international system faced similar challenges in the lead-up to the 2011 Somalian famine. In this case, there was a strong and clear signal from early warnings providers about the deteriorating situation and the likelihood of famine; however, donors and agencies remained unresponsive: both the appeal, and the funding of it, remained essentially flat until famine was declared (see Figure 2.3). Despite the early warnings, it seems many humanitarian actors doubted that the situation would be significantly worse than a normal 'dry' year.[30]

One explanation offered for this scepticism is the 'normalization of crisis',[31] by which humanitarian actors became used to the appalling situation in the country and consequently less able to identify the approaching catastrophe of famine. In the words of one humanitarian

Figure 2.3: 2011 Somalia consolidated appeal and selected early warnings



Source: OCHA Financial Tracking Service (FTS), FEWSNET, Chatham House analysis.

28 See OCHA (2012a). In 2011 (a non-crisis year) under-five Global Acute Malnutrition (GAM) rates were 10.2% in Burkina Faso, 11.4% in North Cameroon, 15.0% in Chad, 10.9% in Mali, 10.7% in Mauritania and 12.3% in Niger. The IPC crisis threshold is 10%.

29 ACAPS and ECB (2012).

30 Darcy et al. (2012a).

31 Bailey (2012), p. 14.

worker interviewed for this research, 'we knew a famine was coming, we just didn't know when. Every year we asked, "is it going to be this time?"'

It would be wrong, however, to infer from this that delay can be attributed solely to the technical challenges of pinpointing the tipping point from livelihood crisis to emergency. As Chapters 3 and 4 will show, the primary barriers to early action are essentially political, and never more so than in the case of the 2011 Somalian famine. In circumstances where inaction is politically attractive, decision-makers are likely to look for non-political justifications for delay, referred to by Buchanan-Smith and Davies as 'escape hatches'.[32] Uncertainty surrounding whether a livelihood crisis is about to become a humanitarian emergency, or whether this year is indeed significantly worse than a normal 'dry' year, provides decision-makers with the opportunity to use escape hatches such as the need to wait for further data or the need for further analysis.

2.1.2 Levels of EWS

Different levels of famine EWS exist, depending on the particular users for which they have been developed.

International EWS

Organizations within the international system such as donors, UN agencies and international NGOs require EWS with international coverage so that they can monitor risks in multiple countries in which they might need to respond. Examples are FEWSNET, which is funded by USAID and produces detailed warnings and situation reports on food security within 25 different countries, and GIEWS, which is based within the FAO and produces regular reports on crop production and trade in 190 FAO member countries.

Regional EWS

Droughts and food crises are often regional in nature: failed rains and poor harvests may affect neighbouring countries simultaneously; a crisis in one country may have implications for its neighbours, such as refugees or the transmission of price rises. Regional EWS allow governments within a region to collectively monitor risks and coordinate response. Regional intergovernmental early warning is coordinated by CILSS (Comité permanent Inter-Etats de Lutte contre la Sécheresse) in the Sahel and IGAD (Inter-Governmental Authority for Development) in the Horn.

The challenges of inter-governmental coordination mean such initiatives often struggle to become effective. In the case of the Horn, a number of international NGOs, donors and UN agencies have developed a regional EWS, FSNWG (Food Security and Nutrition Working Group), which provides a forum for coordination and partners with FEWSNET to produce regional early warnings.

National EWS

Governments in at-risk countries may establish national EWS to monitor and anticipate crises within their own borders. For example, the national systems of Niger and Ethiopia are well-established and effective systems providing regular reporting to central government on the national food security situation. Where effective states do not exist, donors and international agencies may decide to develop national EWS. In Somalia a number of donors and international organizations collaborated to establish the Food Security and Nutrition Analysis Unit (FSNAU). Finally, international organizations may carry out their own 'in house' monitoring and early warning in specific national contexts. For example, WFP's Vulnerability Analysis and Mapping (VAM) framework sees specialist staff undertake monthly tracking of food security indicators and related issues at the country level.

Community EWS

Finally, at the subnational level, community EWS (CEWS) can offer significant benefits to vulnerable populations which may otherwise lack access to EWI, empowering them to undertake their own early action. CEWS are typically provided and supported by a third party, such as local government or an NGO. One such example is a community-based drought EWS operated in the Garba Tulla district of northern Kenya by the Garba Tulla

32 Buchanan-Smith and Davies (1995).

Development Office (GTDO), a local development organization. Participating villages are provided with a radio operated by one or two volunteers. This allows villages to inform each other of the status of particular risk factors such as pasture quality, water availability, livestock health and disease prevalence. In addition, these data are aggregated and monitored by GTDO. Over time, ownership of the system has migrated from GTDO to the communities themselves as the value of the early warnings has become apparent; now the communities manage the radios and pay for their maintenance.[33]

Different users create different demands on EWS. Some of these are summarized in Appendix C. Donors and national governments may use EWS to help inform decisions about how to allocate resources: donors must often allocate aid across competing crises while national governments must allocate resources between competing district authorities. In contrast, an important function of a regional system is to enhance coordination and consensus. A CEWS must, above all else, provide households with the information they need to take early and effective action to protect themselves.

2.1.3 Early warning data

Famine EWS use a variety of different types of data to generate EWI. A summary of different data is provided in Appendix C, along with details on some of the different users and uses of famine EWS. Where EWS use different approaches then different data requirements follow. For example, the GIEWS system administered by FAO has global coverage and monitors country-level data on food prices and availability. FEWSNET covers a smaller number of countries, allowing it to draw on a richer variety of data, for example, on weather, food availability, markets and livelihoods. This allows it to build detailed pictures of the food and nutrition security of households on a subnational level.

As a general rule, the complexity and idiosyncrasy of food crises requires that EWS draw from different data sources if they are to produce information that is detailed enough to help inform response strategies. While simple data such as rainfall or harvest numbers may provide early flags of possible stress and contribute to an overall situation analysis, governments, donors and agencies need more detail for decisions about whether and how to respond.

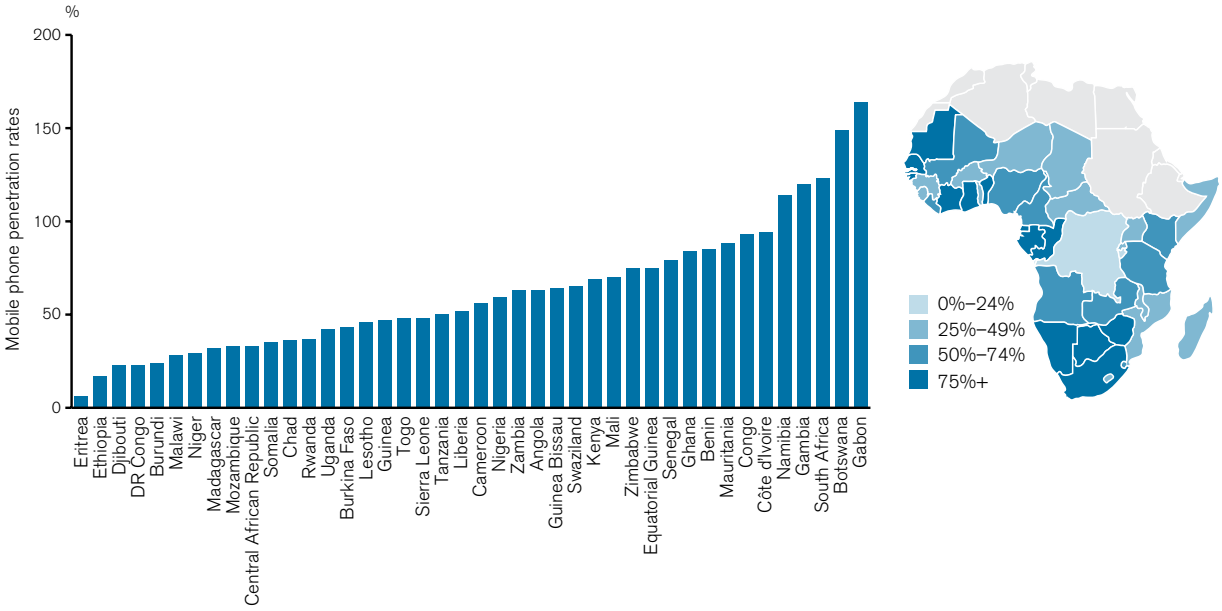
New data and new opportunities

Improvements in EWS have been underpinned by continual improvements in the quality and coverage of data sources such as remote sensing technology. Further improvements may follow from opportunities to exploit information and communications technology (ICT). Mobile phone penetration rates are often very high in food-insecure countries (see Figure 2.4). The GSM Association estimates that there are 735 million mobile phone users in Africa, representing about 70 per cent of the population.[34] Mobile access is increasingly possible for some of the most vulnerable populations on the continent: surveys of Somali refugees at the Dadaab camp in Kenya indicate that just under 20 per cent used new ICTs as an information source.[35]

ICT may offer opportunities to gather new types of early warning data. A retrospective analysis of Twitter activity in the aftermath of the 2010 Haiti earthquake found that real-time monitoring of the social networking site could have revealed the outbreak of cholera up to two weeks before reports from the government health ministry were released.[36] In Japan, an algorithm was developed to extract earthquake data from Twitter feeds, enabling registered users to receive earthquake notifications before official warnings.[37] In the case of food crises, there may also be opportunities to mine early warning data from mobile chatter, perhaps relating to the initiation of short-term coping strategies, migration or health status.

33 See UNISDR (2010a).
34 735 million mobile users cited at http://www.ibm.com/smarterplanet/global/share/19jan2012/mobile_africa/. Population of Africa was 1.03 billion in 2011.
35 Internews (2011).
36 Chunara et al. (2012).
37 Sakaki et al. (2010).

Figure 2.4: Mobile phone penetration rates in Africa



Source: Adapted from GSMA Wireless Intelligence and Deloitte (2012).

With new opportunities come new risks, however. Crowdsourcing of early warning data is in its infancy, and while retrospective studies appear promising, the technique has yet to prove its worth in a real-time situation. And while crowdsourced early warning data may be available faster than other sources, it is harder to validate, making it less robust. It may also be intermittent and subject to sample bias.

Reliable crowdsourcing of early warning data depends upon sufficiently high mobile phone penetration among vulnerable populations. Where this is not the case, it may be possible to crowdseed early warning data, by providing at-risk communities with mobile phones with which they can relay data to a monitoring centre. This is precisely what is happening in northern Uganda, through the Rapid SMS Community Vulnerability Surveillance Project initiated by UNICEF and ACTED. Communities are provided with mobile phones, through which they relay regular updates on birth, death, disease symptoms, malnutrition and household data. This is automatically aggregated in a central database and analysed for warning signs of health or nutrition crises.

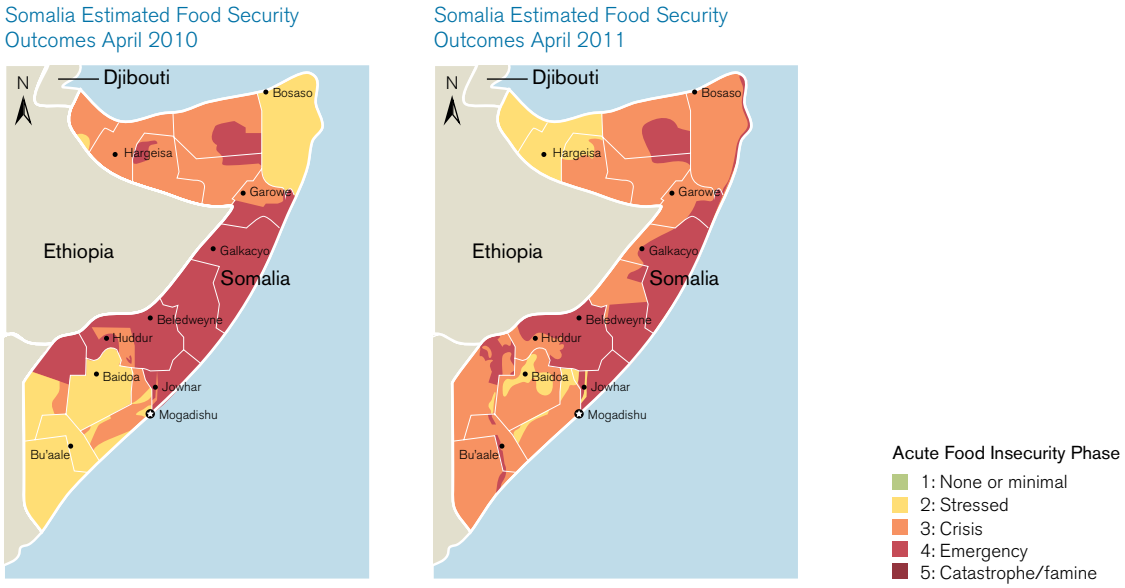
2.1.4 Early Warning Information

EWI – the output of an EWS – may include various different elements, depending upon the particular system; however, most famine EWS generate three distinct types of information:[38]

- ***Positive information*** describes status and situation. This may include weather data, harvest data, market data, health and nutrition indicators, household food deficits along with qualitative descriptions of livelihoods and coping strategies.
- ***Normative information*** provides a judgment as to the severity of the situation. This may be standardized through the use of a common framework and may also include discussion of key risk factors.
- ***Prescriptive information*** makes simple recommendations as to the kinds of actions agencies should be considering or are likely to be necessary (for example, contingency planning, pre-positioning, infant feeding programmes, etc.).

38 Buchanan-Smith and Davies (1995), p. 15.

Figure 2.5: FEWSNET food insecurity maps for Somalia, April 2010 and April 2011



Source: FEWSNET.

Information is likely to distinguish between particular geographic regions or distinct socioeconomic groups, and include both current and future scenarios.

How much information is too much?

Different uses for EWS mean different informational needs, and this can create challenges for early warnings providers. In particular, EWS face a permanent tension between achieving sufficient richness of information for informed decision-making and the simplicity and clarity of message that may often be needed to precipitate action among senior decision-makers.

Colour-coded maps have been used as a way to help achieve this balance. They provide a graphical representation of food insecurity over area, with the worst-affected locations coloured red. This provides an immediate visual image of overall severity, combined with granular information on how the situation varies across particular areas and regions (see Figure 2.5). Such maps are complemented by more detailed quantitative and qualitative information in supporting bulletins.

In order to achieve consistency among EWS, the Integrated Food Security Phase Classification (IPC) provides a common framework for how areas should be classified in terms of food insecurity and how maps should be coloured. These maps have become popular tools for agencies and donors to monitor the situation in food-insecure countries, and are typically prominent on the websites and in the communications of early warnings providers.

However, even with this simple, visual approach, confusion is still possible. During 2011, it appears that some decision-makers confused forecast and current situation maps for Somalia, despite their being labelled correctly.[39] Perhaps a more fundamental problem related to the normalization of crisis in Somalia as described above. In the words of one humanitarian worked interviewed for this research, 'the map of Somalia is painted red every year'. Decision-makers may have simply come to think of the Somalia map as permanently red, and become insensitive to the implications of its darkening to a deeper shade of red in a few months' time.

This problem may have been exacerbated by an IPC protocol instructing that an area be classified according to the most severe level of food insecurity present, irrespective of population size. As a result of this, between 2006 and 2010, maps of Somalia persistently showed large areas

39 Chatham House (2012).

as red, meaning the worst-affected households in these areas were in a state of 'Humanitarian Emergency' – one phase below 'Famine' (deep red).[40] The map of Somalia was literally 'painted red every year' and maps created in 2011 appeared little different from those of previous years despite the more serious situation (Figure 2.5). This issue has now been addressed in the latest version of the IPC.

While there are certainly benefits from presenting information to decision-makers in an accessible and easy-to-interpret format, it would be wrong to assume that simplification will necessarily unlock appropriate early action. Indeed, a common response from donors when presented with early warnings is to request the 'escape hatch' of more detail and further analysis.

In reality, donors and humanitarian agencies are well endowed with experts able to interpret EWI without the need for analyses to be significantly simplified. And where senior decision-makers do require distilled messages or advice, these experts should be able to provide it on the basis of the EWI and their own expertise. As will be explored in Chapter 4, the apparent reluctance of agencies and donors to respond to early warnings is rooted in the incentives they face and the political context in which they operate, rather than the presentation of EWI provided to them.

Should Early Warning Information be open access?

A second tension exists regarding the accessibility of EWI. The advantages of maximizing access are clear. It empowers all actors to respond, from vulnerable communities to governments, agencies and donors. This might be particularly important in circumstances where at-risk groups cannot rely on national governments or the international community to provide support, for example. Second, open access EWI improves the accountability of national governments, donors and humanitarian agencies for responding to early warnings. Finally, making EWI accessible opens up early warnings to scrutiny, which will help make systems more reliable and robust in the long run.

However, EWI often has significant political value, and governments may not perceive it to be in their interests for EWI to be easily accessed by their own populations or other governments. As Chapter 4 shows, despite its effectiveness, the Ethiopian national EWS is subject to perennial political interference, the result of which is avoidable delay. At the international level, systems developed by the humanitarian community to monitor and rank countries according to disaster risks remain inaccessible, primarily owing to concerns that making the information available would displease too many governments unhappy with their rankings.[41]

Finally, in some instances, there may be genuine concern among policy-makers that making EWI widely available could trigger problematic responses. A common concern is that warnings of future food deficits or price rises may encourage market participants to hoard food in anticipation of being able to sell it at a profit later, driving up prices in the process.[42]

This problem in and of itself does not justify the withholding of EWI, however. Traders will typically have the best market intelligence irrespective of whether EWI is available or not. Making EWI accessible should help address this informational asymmetry and contribute to better-functioning markets. Where significant imbalances in market power exist, governments may need to intervene to address oligopolies and improve competition. And where vulnerable groups cannot afford to access food through the market, governments should be prepared to help them do so, or provide them with emergency distributions instead. But limiting people's access to EWI simply limits their ability to protect themselves.

In sum, the benefits of maximizing access to EWI far outweigh any potential downsides. EWI is a public good. According to the UN Office for the Coordination of Humanitarian Affairs (OCHA), information is a basic need of at-risk groups.[43]

40 Hillbruner and Maloney (2012).

41 Bailey (2012).

42 For example, reports emerged of Kenyan farmers hoarding cereals in 2010, following a FEWSNET warning of expected shortages. http://allafrica.com/stories/201001190933.html.

43 OCHA (forthcoming).

Information for whom?

Because EWI is available it does not mean it is accessible. The medium through which information is disseminated may mean that it cannot be accessed by certain users, such as vulnerable communities without access to the internet. Language, or level of technical information, may also act as a barrier to potential users.

This is primarily an issue of differentiating between the needs of users, which will vary considerably between, for example, indigenous pastoralist communities and remote donor agencies. No single EWS is able to generate appropriate and accessible EWI to meet the needs of all users. A variety of different EWS is necessary but careful attention is required to ensure that the needs of all users are adequately met. FEWSNET and FSNAU provided robust and frequent early warnings about the impending 2011 famine in Somalia, aimed squarely at the international humanitarian system. There was comparably little appropriate EWI generated for the people and institutions within Somalia.[44]

Formal versus informal information

A third tension exists between the appropriate balance of formal and informal EWI. Formal information refers to that produced by official EWS, typically in the form of standardized reports, using recognized methodologies and systematized data collection. Informal EWI is relayed outside these channels, and is typically sourced from individuals close to the situation, such as affected communities and their networks, local people or humanitarian field workers. It is usually unstructured and qualitative, and routinely discounted by decision-makers within governments, agencies and donors who tend to emphasize formal EWI, which is seen to be more objective.

However, a tendency to discount informal reports can lead to problems, particularly when formal systems are constrained in their ability to access data of appropriate timeliness or scope. As the 2011 Somalian famine approached, reports of the rapidly deteriorating situation from fieldworkers and local people were essentially ignored by agency decision-makers, who were unable to cross-check them owing to the lack of humanitarian access.[45]

Formal and informal EWI should complement rather than compete. The best picture of a situation is likely to emerge from a process of triangulation, using multiple sources of formal and informal EWI. For example, the Climate Change Adaptation in Africa (CCAA) project, funded by DFID and CIDA, has successfully united indigenous experts and meteorologists to produce consensus weather forecasts, improving both the reliability of forecasts and community acceptance.[46] A common view among participants in the research for this report was that more use could be made of informal EWI, particularly by NGO staff who may have the closest links to informal information networks.

2.2 Institutional context

The technical aspects of early warning are clearly crucial to producing robust, timely and appropriate EWI. However, experience shows that while good-quality EWI is a necessary condition for appropriate early action, it is insufficient. Indeed, the quality of EWI is secondary in determining the shape and timing of any response.[47] More important is the institutional context in which the EWS is located, as it is this that determines how the EWI is used, and by whom.

2.2.1 EWS ownership

Decision-makers are more likely to trust, and therefore use, an EWS in which they have a sense of ownership. This is true of communities, agencies, national governments and donors.[48] Donors are more likely to trust an EWS that they fund or support. Similarly, national governments

44 Lautze et al. (2012).
45 Darcy et al. (2012a).
46 Foresight (2012).
47 Bailey (2012); Buchanan-Smith et al. (1994).
48 Buchanan-Smith and Davies (1995).

are most likely to trust their national system. A sense of ownership can be achieved not only through financial support, but also through engagement. For example, communities are most likely to trust an EWS where they have been involved in its design or are directly engaged in the collection of data or dissemination of information.[49] Similarly, respondents interviewed for this research indicated that early engagement of donors – in the process of EWS design or risk assessments – made early action more likely.

The more decision-makers trust an EWS, the more effective it is likely to be. This raises the important question of how EWS should be developed in order to ensure an appropriate range of stakeholders. Maximizing the funding base is one way to do so, and diversity of funders helps protect the EWS against over-reliance on one particular donor whose financial position may deteriorate or whose funding preferences may change. National EWS are likely to benefit from a mixture of government and donor funding. At the intra-governmental level, engagement of finance ministries is likely to be crucial as very often funding and allocation decisions are ultimately shaped by decision-makers in these departments.

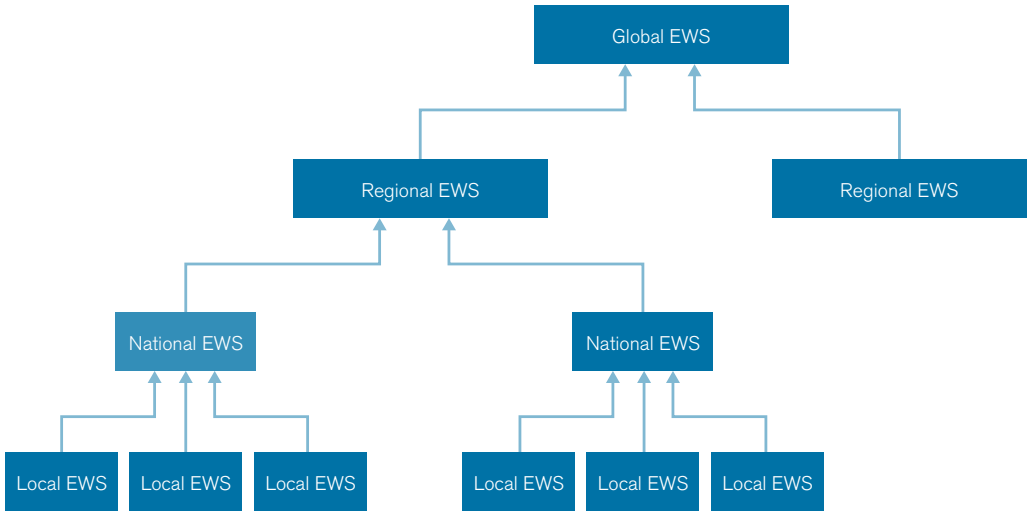
Another possibility is to build linkages between different EWS, for example, linking local systems to national systems, or linking national systems to regional or global ones (Figure 2.6). The national system in Ethiopia depends upon the regular collection of early warning data produced by the district (woreda) authorities' own monitoring efforts. The international early warnings provider FEWSNET works with national-level partners in countries where it does not have operational presence, as illustrated by its partnership with FSNAU in Somalia. And at the regional level in West Africa, governments are exploring ways to integrate their national EWS to support the regional CILSS platform.[50]

Investing in the creation of such linkages creates interdependencies, fostering engagement, increasing understanding and trust, and providing an incentive for capacity-building and knowledge-sharing.

2.2.2 An integrated system

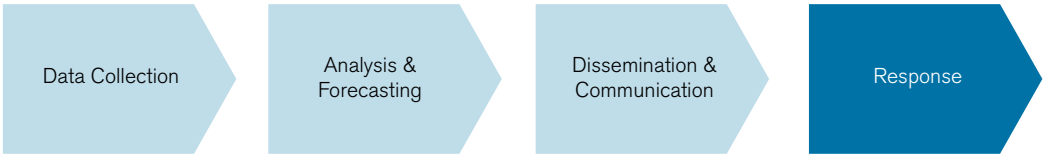
A key determinant of the efficacy of an EWS is the extent to which it is embedded within a decision-making system. The devastation caused by the 2010 floods in Pakistan could have been reduced had institutions existed to link weather forecasting in Europe to decision-making

Figure 2.6: Linking different levels of EWS



49 UNDP/UNISDR (2007); UNISDR (2010b).
50 Melly (2013).

Figure 2.7: Early warning as an integrated system



in Pakistan. Research has shown that extended quantitative rainfall forecasts from the European Centre for Medium Range Weather Forecasts could have predicted the floods six to eight days in advance. But such information never reached the Pakistani government as no agreement or institutional arrangement with the Centre existed.[51]

This is an extreme example, but it illustrates the need for early warnings to be coupled to decision-making processes through appropriate institutions. Arguably, a complete EWS includes not only the stages of data collection, analysis and forecasting, and communication and dissemination shown in Figure 2.1, but also the crucial final stage of response (Figure 2.7).[52]

Box 2.4: Integrated EWS for cyclone risks

A common characteristic of successful EWS is that they are embedded within a set of enabling institutions that link early warning to early action. This was clearly illustrated in 2011 when cyclone Yasi hit Queensland, Australia. Weather forecasting provided sufficient early warning for the local and district authorities to implement disaster management plans, announce evacuation orders and prepare aircraft for recovery flights after the storm had passed. Full evacuation, including of hospitals, was completed four hours before the cyclone made landfall; not a single life was lost. The initial early warning signal was linked to clear decision-making processes at local, district and national levels. Decisions were informed by pre-existing action plans and agreed response strategies.

In poor countries, linking early warning to early action is more challenging, as institutions and capacities tend to be weaker. Despite this, remarkable achievements are possible. Bangladesh is particularly vulnerable to cyclones owing to an unfortunate combination of geographic factors, a high population density and low levels of development. Approximately 40 per cent of global storm surges are recorded in Bangladesh. Worldwide, some of the most catastrophic cyclones of the last half-century are those that struck the country. Chief among these was Cyclone Bhola, estimated to have killed around 500,000 people in 1970. Following this, the Bangladesh Red Crescent Society launched the Cyclone Preparedness Programme to link early warnings providers with at-risk populations. The Red Crescent essentially became an intermediary, communicating early warnings to vulnerable communities from the government's meteorological department and working within the same communities to build preparedness capacities.

Another terrible cyclone struck in 1991, this time killing around 140,000 people. Following this, the national government established the Disaster Management Bureau, signalling a shift in national approach towards preparedness and DRR, a trend continued and deepened through further institutional reform and legislation. Cyclone Sidr, which struck the country in 2007, took 4,234 lives – less than one per cent of the number killed by Cyclone Bhola 37 years earlier.

Source: Haque et al. (2011).

51 Webster et al. (2011).
52 For example, UNEP (2012).

Strong integration of response and early warning is a characteristic of some of the most successful EWS (see Box 2.4), but it is less common among famine EWS, which tend to exhibit weaker linkages between the communication of EWI and response. FEWSNET and FSNAU produced unprecedented volumes of EWI, of increasing urgency, about the deteriorating situation in Somalia during 2010 and 2011[53] but neither was coupled to formal decision-making processes and so the link between communication and response broke down. No rules existed specifying how the warnings should be used or what processes they should trigger.

Integrating international famine EWS, such as FEWNSET, with the response stage is particularly challenging, because the number of responders is large and their interests are fragmented. In addition to national governments, the pool of responders includes numerous donors, with differing interests and foreign policies, and multiple agencies and NGOs with competing agendas and priorities.[54] As Chapter 4 will explore, response decisions within the humanitarian system are highly political and only partly informed by humanitarian need. In this context strengthening links between EWS and response decisions is difficult and not without risk. There is a clear rationale for keeping the objective activities of producing and communicating EWI separate from the more politicized activities of response analysis and planning. It is for precisely this reason that FEWSNET, although entirely funded by the US government, operates on an arm's length basis from USAID.

At the national level, linking famine EWS to response should be easier as there is one primary responder – the national government – with one set of interests. The examples of Ethiopia and Niger show that it is possible to build integrated famine EWS with formalized decision-making processes linking the communication of EWI to response. However, as Chapter 3 explores next, the right national institutions can help achieve early action, but they cannot guarantee it.

53 Hillbruner and Maloney (2012).
54 Bailey (2012).

3. Early Warning and Early Action in Affected Countries

Key messages

- Early warning capacities in many vulnerable countries in the Horn and Sahel are low and in need of significant investment.
- Effective national EWS are invariably located in strong bureaucracies and linked to regular reporting and decision-making processes which have developed over long periods of time.
- Pre-existing national platforms for early action, such as safety nets or emergency food aid infrastructure can reduce lead times.
- Beyond providing vulnerable communities with EWI, governments and local authorities must create an enabling environment for community early action.
- Inaction can be a rational strategy for governments if at-risk populations are politically unimportant or where there are political risks associated with acknowledging famine risk.
- National governments can best secure early assistance from donors by presenting an attractive political risk profile, typified by low corruption and support of donors' geopolitical agendas.

The core purpose of the state is to protect its citizens. Famine prevention is therefore first and foremost the responsibility of national and local governments as part of their responsibilities to protect citizens from avoidable catastrophe. As Menkhaus (2011) argues:

> The most fundamental duty of any government is to provide its citizens with basic protection from physical threat and extreme deprivation, whether from war, criminal violence or natural disaster. Everything else should come second.[55]

The absence of an effective state in Somalia and the propagation of a particularly violent conflict among civilian populations is one of the principal reasons why a regional drought triggered famine there but not elsewhere in the Horn. Even within Somalia, famine was avoided in Puntland and Somaliland, areas that had established effective local authorities and where there was greater peace.

But the existence of a state is no guarantee against famine. Some of the most notorious famines in living memory have occurred under the watch of functional and often strong states.[56] Famine prevention cannot therefore be reduced to simple questions of state capacity. This chapter describes six national conditions that contribute to early action and the prevention of famine.

Condition 1: Adequate early warning

Authorities must have access to adequate and timely EWI if they are to anticipate and mitigate potential food crises. Countries with effective national EWS, such as Ethiopia and Niger, have shown themselves to be better able to prepare for crises and mobilize international support.

The national EWS of Niger is widely regarded as the most effective in the Sahel region. Like that of Ethiopia, it depends upon the regular provision of early warning data from local authorities. These data are then processed by the special early warning or *Système d'Alerte Précoce* (SAP) unit of central government. During the main agricultural season,

55 Menkhaus (2011).
56 Bailey (forthcoming).

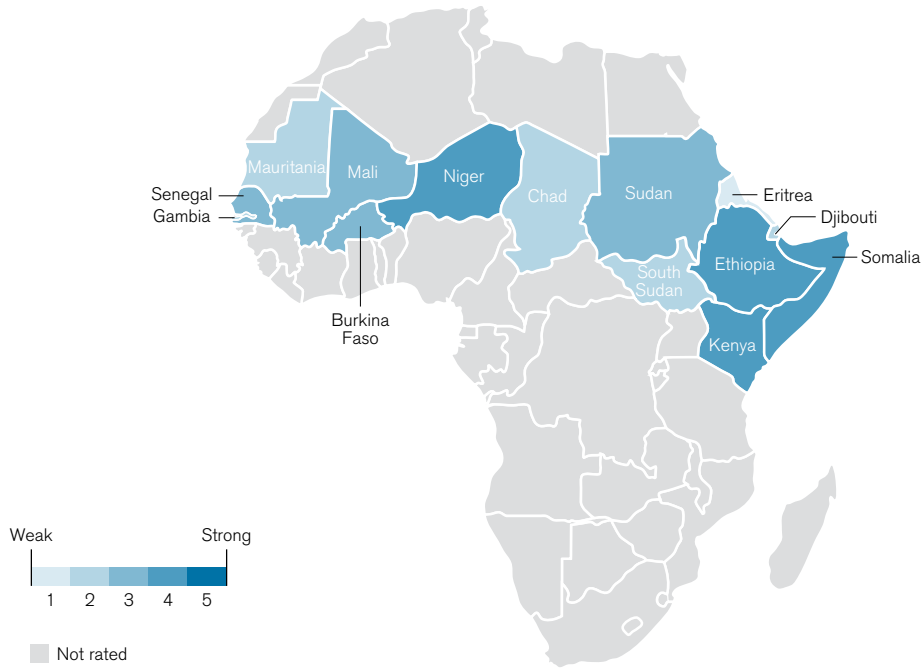
the SAP produces an assessment of food security in each of the country's administrative areas (*départements*) and municipalities (*communes*). This EWI is then examined at a national review meeting and those *communes* considered at critical or highly critical risk are placed on monthly monitoring. This system allowed President Issoufou to announce in October 2011 the risk of a national food crisis in 2012 (see Box 4.1) and request international assistance well in advance of the lean season. Similarly, following the military coup in 2010, the SAP enabled the country's new military government to announce a crisis and approach the international community for help. Had this not happened, in the words of one senior donor official, 'the 2010 crisis would have been a total nightmare'.[57]

The SAP's effectiveness also offers benefits in terms of Niger's engagement with the humanitarian system: because donors and agencies have a relatively high degree of trust in the SAP, its EWI provides a credible basis for engagement between the government, donors and agencies on questions of response analysis and resource mobilization.[58]

There are, of course, significant challenges in administering a sophisticated national EWS in a country as poor, and as large, as Niger. The sheer volumes of data involved present a major operating challenge, particularly in the absence of an appropriate telecommunications network and electricity grid. A lot of the early warning data is transmitted in handwritten or typed form and literally bussed to Niamey, where it is hard-coded into the SAP systems.[59]

Despite these challenges, Niger's SAP operates remarkably well and provides a public good of considerable value. However, the fact that it is by some way the best in the region and yet relies on handwritten reports ferried around the country by bus underlines the significant need for investment in national early warning capacity.

Figure 3.1: EWS capacity in sub-Saharan Africa



Sources: Interviews with UN and agency staff; UNISDR (2011); FAO/WFP and USAID (2012); Oxfam International (2012); Tefft et al. (2006); Prevention Web (2012); FEWSNET (2012).

Note: Rating for early warning system capacity provided by Chatham House, based upon government self-assessment of performance of Hyogo Framework for Action Priority Area 2 on early warning systems and capacity, available literature and interviews with UN, NGO and donor staff. Full analysis with explanatory text found in Appendix D.

57 Melly (2013).
58 Ibid.
59 Ibid.

Condition 2: Sufficient bureaucratic capacity

Good EWI is key to triggering national early action, but as Chapter 2 showed, unless early warning is embedded within appropriate institutions, its value is greatly diminished. Crucially, the ability of government to design and deliver an appropriate early response rests upon sufficient bureaucratic capacity: enough trained people in the right places with the right tools at their disposal.

Both the Ethiopian and Nigerien EWS are located within effective bureaucratic structures that link local and national levels, and link EWI to decision-making processes. EWS, in one form or another, have been in use in Ethiopia since the 1970s. The current EWS is administered by the Early Warning and Response Directorate (EWRD) based in the Ministry of Agriculture. It relies on regular reports from the district (woreda) level which it complements with additional data from other ministries. A monthly Early Warning and Response bulletin is produced and distributed to the regional states, which have their own disaster management bureaus and are responsible for ensuring the information reaches the woreda and community (kebele) levels.

In addition to the EWS, Ethiopia conducts a sophisticated twice-yearly needs assessment on which the government bases its forecasts of food insecurity across the different regional states, and which feeds into the annual Humanitarian Requirements Document (HRD) that sets out the official estimates of required assistance early each year.

The Nigerien civil service is viewed as one of the strongest in the region. Officials working at the *département* level have close links to colleagues in ministries and are accustomed to regular reporting to central government. The SAP itself is located in central government alongside its sister unit, the *Cellule de Crise*, which is responsible for response analysis and planning – linking early warning to decision-making. As with Ethiopia, Nigerien early warning capacity has developed over a long period and has continued to operate effectively under very different political regimes.

The location of early warning and response activities within government can be an important determinant of effectiveness. Both the SAP and the *Cellule de Crise* report directly to the prime minister of Niger and occupy offices close by, providing regular access to the top levels of government. In Kenya, however, early warning and early action appear to have fallen through the cracks created by inter-ministerial turf wars.[60] The nascent National Drought Management Authority (NDMA) now has the opportunity to take ownership of the agenda within government and link long-term to short-term responses under the ten-year drought management strategy. Where the NDMA will be located in government is uncertain, however. It is intended to be an independent agency, so, ideally, as with the SAP and *Cellule de Crise* in Niger, it would be placed close to senior levels of government, such as within the Office of the Presidency. Currently, however, the NDMA is located in the Ministry of Arid Lands, which, in turn, may become a department in the Ministry of Agriculture. The NDMA's long-term position is therefore unclear.

Strong linkages to finance ministries are also likely to be important, certainly in the event that government funds must be mobilized or reallocated in order to prevent a crisis, but also to ensure ongoing funding of early warning capacity such as staff, risk assessments, systems, communication infrastructure and so on.

The capacity of government to form effective partnerships with donors and agencies can be an important factor in translating early warning into early action at the national level. Inevitably, effective partnerships depend most on good political relations with donors (see Condition 4, Chapter 3 and Condition 5, Chapter 4), but bureaucratic capacity is also important. As described above, the effectiveness and reliability of the Nigerien EWS provides a platform for engagement with donors and agencies. In Ethiopia, a semi-permanent aid infrastructure has emerged around a highly effective partnership of government ministries with agencies and donors. Each year, food aid distributions are jointly planned and undertaken on the basis of the HRD, although political factors often complicate matters (see Condition 3, Chapter 3). Compare this with Kenya, where a notionally government-led partnership has proved

60 Mosley (2012).

ineffective and essentially been circumvented by a parallel system operated by agencies and donors.[61]

Just as effective bureaucracies facilitate early action, dysfunctional bureaucracies undermine it. Weak local bureaucratic capacity has hampered Mali's attempts to develop a reliable EWS, while reports of corruption within the *Commission à la Sécurité Alimentaire*, the key agency responsible for food security and early action, do little to reassure donors and agencies.[62] In Kenya, the closure of the World Bank-funded Arid Lands Resource Management Project (ALRMP) following a corruption scandal in 2010 is argued to have left the country without an important funding stream for early action when drought hit in 2011.[63]

Condition 3: National politics conducive to famine prevention

Adequate information and capacity are necessary but not sufficient conditions for early government action. In particular, political leaders must perceive it to be in their interests to act. Any such decision is likely to depend on an assessment of the differing political risks and opportunities presented by early action on the one hand and delay on the other. This in turn is highly dependent upon the political context, the extent to which government is accountable to different interests and how different interests are likely to be affected and respond.

The national politics of famine prevention are therefore complex and context specific, and it is difficult to make generalizations that can inform a one-size-fits-all set of prescriptions. Policy and institutional reforms designed to improve the accountability of government to vulnerable populations and increase the political risks of delay are important. However, such reforms have implications for the balance of political power and are therefore likely to create losers that will resist them. Successful reform will be sensitive to initial institutional conditions, the domestic political economy and 'soft' factors such as culture and history.

Consider Ethiopia. The history of famine in the country and its association with regime change means there is a strong anti-famine contract between the government and the people. From this follows a suite of institutional and organizational arrangements designed to reduce the risk of famine: a national EWS and regular needs assessments, a major safety-net programme that regularly assists over seven million Ethiopians, an embedded food aid architecture underpinned by close cooperation between government and the international community. Yet despite this, early action is regularly hindered by political interference in the production of national needs assessments and the HRD, which sets out official estimates of region-by-region food assistance needs at the beginning of each year. Federal government approval of these estimates before release perennially slows the response process and often sees numbers reduced to 'unrealistically low levels'.[64] In February 2011 the HRD underestimated eventual needs by 187% in the Southern Nations, Nationalities and Peoples' Region (SNNPR),[65] resulting in numbers having to be revised upwards twice over the course of the crisis. This reduced the scope for early action, as the SNPPR appeal was not finalized until July – a month after the peak of the hunger gap.[66]

Despite Ethiopia's capacity to assess humanitarian needs accurately and in good time, they are instead politically negotiated and usually late. Why would the federal government, the legitimacy of which depends to a large extent upon preventing famine, systematically delay early action? There are a number of possible explanations. For example, regional authorities may overestimate needs as they compete for scarce food aid resources, creating a dynamic in which regional governments routinely inflate estimates and federal government routinely discounts them. The principal explanation, however, is political risk. Government legitimacy rests on the absence of famine, so famine represents a major political risk. As such, government has a powerful incentive to downplay the risk of famine. In the case of Ethiopia, this incentive is magnified

61 Mosley (2012).
62 Melly (2013).
63 Mosley (2012).
64 Sida et al. (2012).
65 Mosley (2012).
66 Sida et al. (2012).

by a national development narrative underpinned by double-digit economic growth and rapidly increasing agricultural productivity. Ethiopia aims to be a middle-income country by 2025. The spectre of famine is not consistent with this remarkable story of progress. As such, the political risk of famine is managed through two somewhat contradictory strategies: prevention and denial.

The prevailing analysis of contemporary famines as failures of government means that Ethiopia is certainly not the only example of a government reluctant to acknowledge famine risk. In Niger, despite a relatively effective national EWS, the presidency of Mamadou Tandja from 1999 to 2010 was characterized by almost farcical levels of denial, exemplified by one account of a signboard bearing the logo for NGO *Action Contre la Faim* (Action Against Hunger) being removed for fear that Tandja should see anything suggesting there might be hunger in Niger.[67] Tandja's stance was also deeply pernicious. During the 2005 emergency he denied any problem, telling BBC reporters 'the people of Niger look well fed'.[68] Eventually he expelled the BBC in an effort to suppress information, and came close to shutting down WFP's country office.[69]

Famine-associated political risks are likely to increase with incumbency. Populations are unlikely to punish a new government for inherited food insecurity, but may be less forgiving of a long-serving administration that has done little to reduce vulnerability to famine. Tandja's denial became more extreme as his time in power progressed. In contrast, after only six months in office, the current president, Mahamadou Issoufou, was able to openly acknowledge the country's perilous food security situation and request international assistance without fear of blame. As Box 4.1 shows, this mobilized the international community some ten months in advance of the peak of the hunger gap and enabled early action. As Issoufou's term increases, the pressure on him to demonstrate improvement in Niger's food security, particularly through his flagship 3N (Nigeriens Nourish Nigeriens) initiative, may increase the political risks associated with early action.

The fact that political incentives for early action may diminish with incumbency suggests political institutions that limit terms in office and militate against the perpetuation in power of one party or individual should help preserve responsiveness to early warning. More broadly, a prominent school of thought argues that the optimum set of political institutions for famine prevention are those of democracy: a regular electoral cycle, free press and effective opposition mean that no government could preside over famine without facing removal. According to Amartya Sen, 'Democracy and an uncensored press can spread the penalties of famine from the destitute to those in authority. There is no surer way of making the government responsible to the suffering of famine victims.'[70] Sen actually goes one step further, to remark that famine does not occur in countries with democratic political institutions.[71]

The evidence appears somewhat more nuanced, however (see Box 3.1). While on balance it is probably fair to say that democratic institutions help safeguard against famines and major food-related emergencies, they do not provide a guarantee. Other important factors include:

An anti-famine contract between the state and the people

Ethiopia is not a democracy, but nevertheless there exists a strong, implicit anti-famine contract between the state and the people.[72] This derives from Ethiopia's recent history of terrible famines and in particular the close association of regime change with famine.

In addition to democratic institutions, India too has a powerful anti-famine contract: following a series of catastrophic famines during colonial rule culminating in the Bengal famine of 1943, famine became a rallying cry of the independence movement, and famine prevention an imperative of the

67 Melly (2013).

68 Rubin (2009a).

69 Melly (2013).

70 Amartya Sen, 'Public Action to Remedy Hunger', p. 12, Arturo Tanco Memorial Lecture, August 1990, London, arranged by the Hunger Project and CAB International in association with the Commonwealth Trust and the Royal Institute of International Affairs (Chatham House).

71 Sen (1999).

72 Note that the notion of 'anti-famine contracts' was first proposed by de Waal (2000), who cited India and Botswana as examples. Here the term is used somewhat more loosely to refer to countries with a powerful sense of government accountability for famine prevention, through historical, cultural or institutional factors.

independent Indian government.[73] Regardless of the political system, famine in either Ethiopia or India presents an existential threat to the incumbent government.

In Niger, the link between government legitimacy and famine prevention is less apparent. Under the administration of Mamadou Tandja, there was no anti-famine contract between the state and the people, and government accountability for famine prevention was minimal.[74] This appears to have changed following the 2010 coup and subsequent elections, as the actions of President Mahamadou Issoufou – to request early international assistance for the 2012 crisis and undertake an ambitious national food security programme – indicate. However, it remains to be seen whether a long-term anti-famine contract has in fact been institutionalized in Niger or whether the political focus on food security is transient and will wane with incumbency as discussed above.

A vibrant civil society

As well as a free press, a vibrant national civil society has an important role to play through:

- mobilizing to claim civil, political, economic and social rights all of which are linked to famine prevention;
- mobilizing minority groups, which may often be those most at risk, in order to increase government responsiveness to their needs;
- informing society about key issues such as conditions in food-insecure and marginal regions and their rights more generally;
- pressuring government to act on specific issues such as food security, health and education, for example.

The unresponsiveness of the Kenyan government to the unfolding food crisis in its northern territories in 2012 indicates the absence of a strong anti-famine contract. However, the country's vibrant civil society and free press provided an important counterbalance to this deficiency, raising public awareness of the crisis and prompting the government into belated action (see Box 3.2). These checks on government inertia are significantly weaker in neighbouring Ethiopia, where civil and media freedoms are heavily curtailed and new legislation effectively prevents NGOs from undertaking advocacy activities.[75]

A national discourse on food security and hunger

Where issues of food security are given prominence in national debates, governments are more likely to attach comparable weight to the agenda. Government, political opposition, civil society and the media are crucial to engendering a discourse on food security in vulnerable countries. Through the 3N initiative, the government of Niger has done much in recent months to foster a national discourse on food security, in stark contrast to the earlier regime of Mamadou Tandja, where such discourse was actively suppressed. In Kenya, the government's National Food and Nutrition Security Policy specifically identifies 'media, local communities and civil society' as key 'strategic partners' in developing and implementing national strategies and commits to ensure appropriate channels for advocacy.[76] In Ethiopia restrictions on civil and political freedoms mean any such discourse is impossible.

Accountability mechanisms

In addition to democratic institutions and a free press, there are other ways to improve government accountability. Ethiopia's decentralized model of government, with regional authorities responsible for early warning, needs assessments and disaster management, increases the responsiveness of the government apparatus to local demand (though the political negotiation of humanitarian needs between federal and regional government still needs to be addressed). Accountability can also be brought into law, to establish measures against famine and responsibilities for preventing it, ideally as part of broader DRR legislation. For example, the draft Ethiopian Disaster Risk Management policy proposes legislation to specify the responsibilities of relevant individuals and institutions, and penalty measures in the event that these are not met.[77] In

73 de Waal (2000).
74 Devereux (2009).
75 Mosley (2012).
76 Government of Kenya (2011a).
77 Federal Democratic Republic of Ethiopia (2009).

Kenya, the government's National Food and Nutrition Security Policy commits it to a number of steps to improve accountability, including the development of county-level Food Security Committees, legislation to ensure Kenya's international obligations related to food security and nutrition are enshrined in national law and the submission of an annual report detailing government performance in meeting these obligations for debate in the National Assembly.[78]

Box 3.1: Famine and democracy

The argument that democratic institutions prevent famine is pleasingly intuitive. A free press holds government to account and ensures populations are informed of any crisis, while regular elections provide the means by which populations can punish a government that allows famine to occur. However, the case is difficult to prove, not least because of differences in opinion as to what constitutes a famine. While it is contestable whether a famine has ever occurred in a functioning democracy, major food-related emergencies certainly have. Democratic institutions may help encourage early action from governments, but they do not guarantee it.

India is often presented as the paradigmatic case of democracy preventing famine. However, major food-related emergencies did not end with independence and the introduction of an electoral democracy in 1947. A possible famine occurred in 1967 in the state of Bihar, with excess mortality potentially extending into the tens of thousands (Rubin, 2009). As the situation in Bihar deteriorated, to secure emergency aid from the federal government the state government needed to declare a famine, but with elections looming it was reluctant to do so for fear of providing the opposition with political ammunition. So instead it requested assistance without making a declaration, but poor relations between the two governments, and the federal government's reluctance to assume any responsibility for the crisis, meant resources were withheld. In the end, a declaration was made and resources were then provided, but not until after the election. In effect, preventing famine was put on hold while the election was contested.

Rather than militate against famine, it appears that democratic institutions in the context of elections and poor political relations between the authorities resulted in a blame game of furious buck-passing and minimal action (Rubin, 2009). Brass (1986) goes as far as to say that the Bihar famine was 'democratized', meaning that questions such as whether or not there was a famine, whose fault it was and whose job it was to respond became the subject of political struggles between different parties and different layers of government.

Further examples are not confined to India. In 2005, the UN described Niger as a 'model democratic state', the same year in which Mamadou Tandja refused to acknowledge and respond to a major food emergency (Rubin, 2009). However, Tandja's suppression of media reporting indicates that while the country may have been an electoral democracy, it lacked the necessary media freedoms to be considered a full democracy.

More generally, examining food crises with excess mortality between 1972 and 2000, Plümper and Neumayer (2009) found nine had occurred in democracies. The mean mortality was 43,000, and the worst occurred in Sudan in 1988 with 250,000 deaths (though this famine was inextricably linked with war). In autocracies, 26 food crises with excess mortality occurred in the same period – nearly three times as many. The mean mortality was nearly twice as high (82,000), and the worst occurred in Bangladesh in 1974, with 1.5 million deaths.

This suggests that while democracy may not eliminate mortality in food crises, it certainly mitigates it. This is indeed what Plümper and Neumayer found when they performed regression analyses on their data: countries that were more democratic experienced lower rates of food crisis mortality after controlling for other variables.

78 Ibid.

Irrespective of the political system, domestic political economy is a crucial factor in determining political risks and famine outcomes. The catastrophic Sudanese famine of the late 1980s was in part due to the decisions of the democratically elected government to subsidize food for the vocal and easily mobilized urban population of Khartoum while ignoring starvation in rural areas – particularly in the south where it was engaged in a vicious civil war.[79]

Civil war increases the incentive for government to penalize or neglect opposing constituencies, but the incentive remains in the absence of conflict. Generally speaking, governments will do more to build resilience to drought among constituencies they perceive to be politically important, and they will be more responsive to these communities' needs when they are at risk. Areas where political support is weak or where populations have little political power – through the vote or through mobilization – can expect to be neglected. For example, in Ethiopia, famines in the politically important central and northern highlands of Wollo and Tigray contributed to the overthrow of the previous governments of Haile Selassie and the Derg. The current government reduced the political risks associated with famine by developing emergency relief capacity to protect these areas at the expense of politically marginalized pastoralist communities in the country's periphery. In effect it shifted the burden of drought vulnerability from the politically important to the politically unimportant.[80]

Similar issues of political economy are apparent in Kenya, Ethiopia's democratic neighbour. Despite high rates of poverty, per capita public spending in many northern dryland counties – notably Turkana, Wajir, Mandera and Samburu – is relatively low. These regions are sparsely populated by politically marginalized pastoralist communities. The high levels of poverty, low levels of public spending and climatic conditions in these arid and semi-arid areas leave them particularly vulnerable to drought, and these districts were among the worst affected during the 2011 crisis.

This is illustrated in Figure 3.2, which shows the distribution of food insecurity during the 2011 crisis alongside data on poverty, population density and per capita public spending. The northern drylands, where food insecurity was most extreme, have some of the highest rates of poverty, yet benefit from comparably low levels of public spending. These large regions contain small, disbursed populations that struggle to organize and assert themselves as effectively as those in more densely populated and wealthy areas to the south.

Political indifference to the dryland districts explains the region's vulnerability to drought. It also explains Nairobi's delay in responding to early warnings of the unfolding emergency to the north in 2011. One major evaluation of the crisis found that there was no effective national system of alert for the northern regions and more fundamentally 'no real preventive and preparedness mindset in Kenyan national institutions around drought and hunger in the north'.[81]

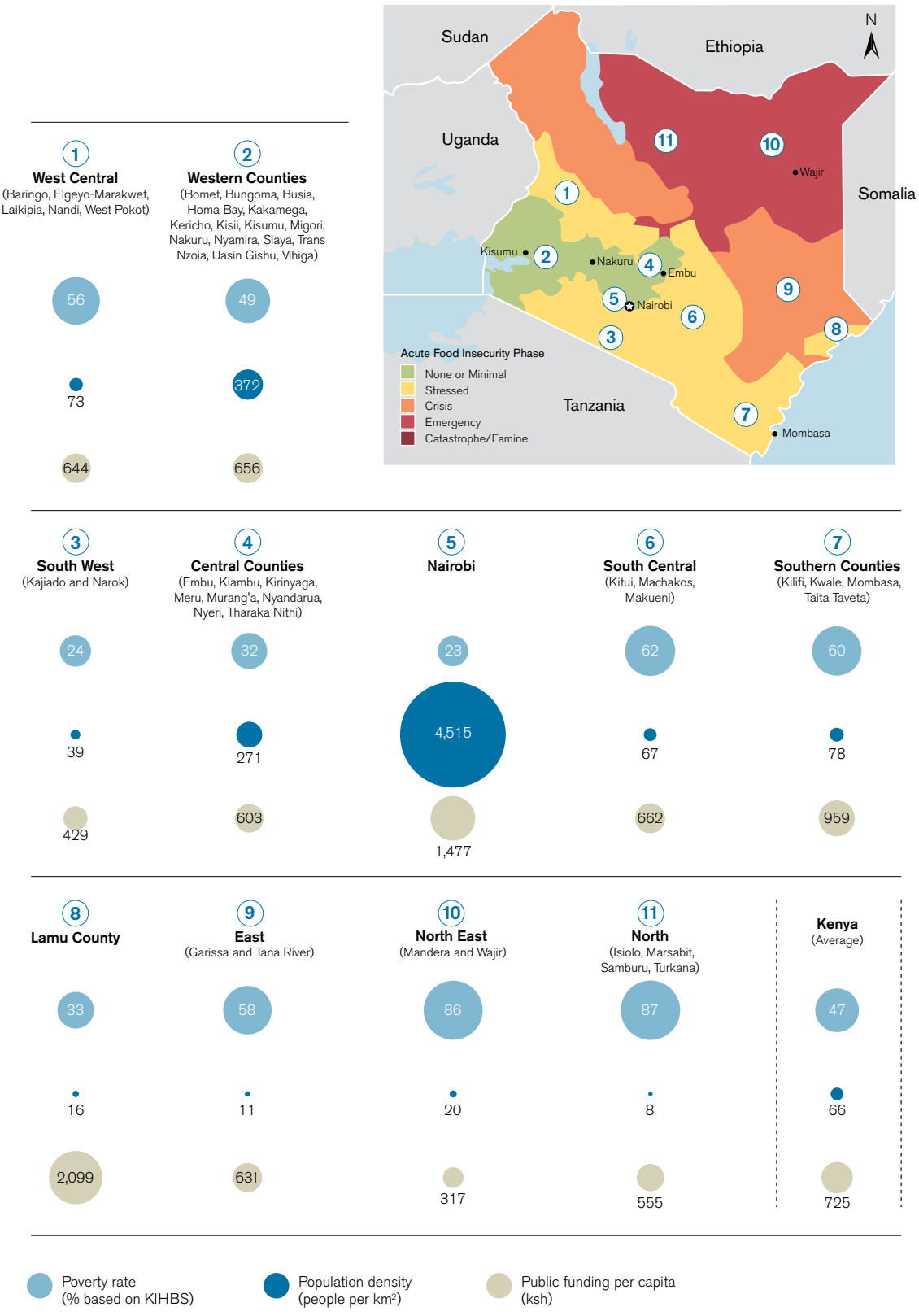
However, a number of new considerations now mean that the north may be becoming less irrelevant to calculations of political risk in Nairobi:[82]

- Demographic trends have increased the political importance of ethnic Somali populations, and north-eastern voters played something of a swing role in the closely contested 2007 elections.
- Kenya plans to develop an oil pipeline and transport links through the north of the country, from Ethiopia, Uganda and the oilfields of South Sudan to its port, Lamu.
- Oil has been identified in Turkana, dramatically increasing the district's political importance.

A high-profile national campaign to mobilize aid for Kenya's drought victims in 2011 also indicates that food crises in the north may be becoming increasingly unacceptable to the rest of Kenyan society (see Box 3.2). These factors combined suggest the long-term outlook may be one of greater government concern for the food security of the north.

79 de Waal (2000).
80 Maxwell and Lautze (2007).
81 Slim (2012).
82 Mosley (2012).

Figure 3.2: Food security outcomes in 2011 and demographic and economic data for different regions of Kenya



Sources: FEWSNET (2011); Government of Kenya (2011b).

Note: Poverty rate, population density and public spending per capita recorded by the Government of Kenya for 2009. Poverty data measured by the Kenyan Integrated Household Budget Survey (KIHBS).

Box 3.2 Kenyans for Kenya

In 2011, the Kenyan government was woefully slow to respond to warnings of food crisis in the arid north of the country. A national emergency was finally declared on 30 May as the crisis approached its peak, and as national awareness of the issue grew and criticism of the government mounted. Shortly afterwards the Kenyan Red Cross Society (KRCS) launched an innovative appeal in partnership with the mobile operator Safaricom, Kenya Commercial Bank and the Media Owners Association.

The Kenyans for Kenya (K4K) campaign was launched on 27 July 2011 and aimed to raise Ksh500m ($5.4m) in four weeks. Donations were made via mobile phones (about half the population have a mobile phone) and at bank branches and in certain shops. Further contributions were made from businesses and SMEs and schools and universities. After one week, Ksh300m had been raised. After four weeks, donations stood at over Ksh1bn (nearly $11m) – twice the original target. 760,000 Kenyans are estimated to have contributed.

The campaign allowed the KRCS to provide emergency food and medicine and also allocate Ksh300m for development and livelihoods programmes. Perhaps more importantly in the long term, it is likely to have contributed to an important shift in the political risk calculations of politicians in Nairobi. The government was caught on the back foot by the public response to the campaign and by associated criticism in the media. Previous assumptions that government could permit food crises in the north and go unpunished by politically important constituencies in the south were proved wrong.

Condition 4: Conducive relations with donor governments

Governments in famine-prone countries are likely to be dependent to some degree on external assistance in order to mitigate crises, so the quality of their relations with donor governments is important for early action.

The highly effective food aid infrastructure of Ethiopia, in which donors and international agencies effectively ensure a continual food aid pipeline (see Condition 2, Chapter 3) is facilitated by Ethiopia's effective bureaucracy, but fundamentally rests on the government's relations with Western donors – particularly the US.

This close and effective partnership is maintained despite donor concerns about the government's poor track record on civil rights and democratic reform. While these issues do represent some political risks for donors concerned that their programmes may be presented domestically as undermining civil and political rights, these risks are offset by other factors. In particular, Ethiopia is viewed as a relatively incorrupt and competent user of aid, and so presents an attractive risk profile to many donor governments.

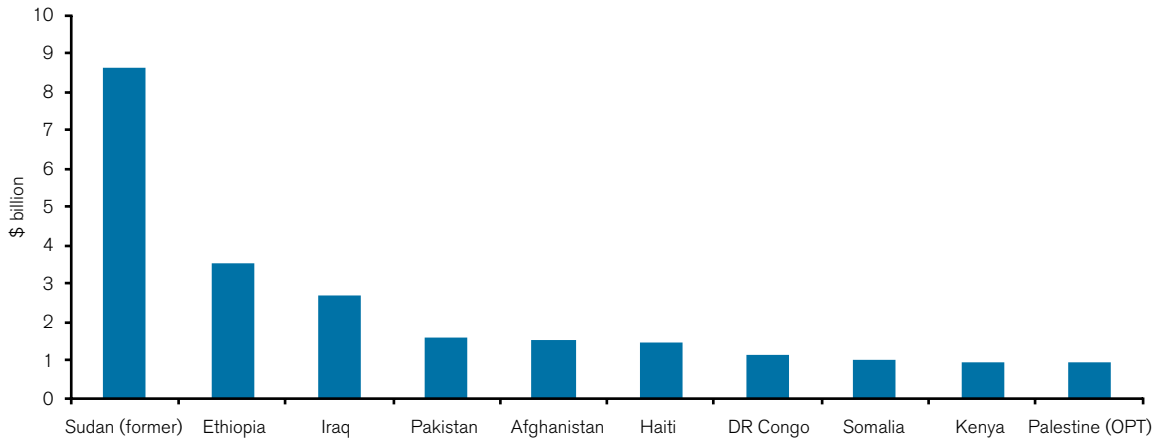
In general, donors place considerable emphasis on the risk that aid is misappropriated, and therefore corruption has a particularly corrosive effect on donor–recipient relations. For this reason, corruption is a particular threat to early action in countries that are heavily dependent on external assistance. The food crisis that affected Malawi in 2002 and may have cost as many as 10,000 lives had its roots in multiple causes; however, the country's heavy dependence on, and gross mismanagement of, foreign aid appears to have been a critical factor.[83] Kydd et al. (2002) argue that the climate of mistrust and disrespect that characterized donor relations with the Malawi government before the crisis 'was a major factor in delayed recognition of and response to emerging evidence of a famine'.[84]

Donors also prioritize geopolitical risks in their relations with affected countries. For example, a significant share

83 Rubin (2009b).

84 Citation from Rubin (2009b).

Figure 3.3: Recipients of humanitarian spending by the United States, 2002–12



Source: OCHA Financial Tracking Service (FTS).

of humanitarian aid from the United States, the world's biggest humanitarian donor, goes to strategically important countries such as Ethiopia, Iraq, Afghanistan and Pakistan (Figure 3.3). Ethiopian aid receipts are maximized because the government is not only relatively incorrupt, but also because it is a key regional ally of Western donors in the Global War on Terror (see Condition 5, Chapter 4).

Contrast this to South Central Somalia in 2011, where the *de facto* authority was al Shabaab, considered a Foreign Terrorist Organization by the US and engaged in a war with the impotent Transitional Federal Government of Somalia (TFG), backed by the West. Al Shabaab's deeply antagonistic relations with Western donors saw humanitarian aid to the region decline dramatically in the three years preceding the famine and were a significant factor in limiting the response of donors to escalating early warnings as famine approached (see Condition 5, Chapter 4). From a donor perspective, the risk of humanitarian aid being captured by al Shabaab took priority over the risk of a humanitarian catastrophe in Somalia.

Importantly, aid from non-Western donors, most notably from Organization of Islamic Cooperation (OIC) member states, also played a significant part in the response to the 2011 Somalian famine. Notably, implementing agencies funded primarily by these governments were able to operate more freely, as a result both of fewer constraints imposed by the donors themselves and of better relations with al Shabaab.[85]

Currently, conducive donor relations are best secured by presenting a favourable risk profile to Western donors: low corruption and support of Western geopolitical agendas. But the rise of donors outside of the OECD-DAC, with potentially different geopolitical agendas, priorities and risk preferences, may have important implications for the nature of donor–recipient government relations in the future.

Condition 5: Existing platforms for action

One of the reasons the Ethiopian response to the 2011 Horn of Africa crisis was more effective than that of its neighbours was the presence of pre-existing, embedded programmes that provided some basic level of protection for vulnerable populations, but crucially could be scaled up in response to early warnings and increasing needs, most notably:

- the Productive Safety Net Programme (PSNP);
- the semi-permanent food aid architecture;
- the Outpatient Therapeutic Programme (OTP).

85 Darcy et al. (2012a).

The first tier of action is the PSNP, which provides ongoing cash and food transfers to vulnerable households, reaching about 7.6 million beneficiaries. In times of crisis, it can be scaled up via two additional funding mechanisms that extend its reach to additional households experiencing 'transitory' needs: a contingency fund up to 20 per cent of the budget, and beyond this a larger risk-financing mechanism. In 2011, the risk-financing mechanism was triggered to meet the transitory needs of 9.6 million people (of which 6.5 million were existing beneficiaries of the ongoing programme) and was found to have 'played a significant role in ensuring people did not "fall off the edge" into starvation'.[86]

Transitory needs are also met through the second tier of the semi-permanent food aid system, administered jointly by the government and humanitarian community. This is responsive to needs set out in the HRD, based on twice-yearly needs assessments. The revised HRD of July 2011 requested about 380,000 million tonnes of food aid for almost five million beneficiaries.[87]

The OTP provides a final tier of response capacity through a network of village-level centres to assess child malnutrition and provide ready-to-use therapeutic foods. In 2011, the OTP treated 329,535 severely and acutely malnourished children across 7,479 sites throughout the country.[88]

In combination, these three elements have systematized the response in Ethiopia and linked it to similarly systematized early warnings and needs assessments. One major evaluation of the 2011 Ethiopian response concluded that 'the government and its partners, by making what was once thought of as emergency assistance into something predictable and planned, has made a major step forward in providing for the most vulnerable in Ethiopian society'.[89]

Despite its considerable success, the Ethiopian system remains primarily humanitarian in nature: focused on identifying and meeting emergency needs as effectively and swiftly as possible. Longer-term development and DRR programmes may provide platforms for early action while also building resilience and improving livelihoods. An evaluation of the 2011 crisis in Kenya found evidence that those areas which coped best with the drought were those with ongoing DRR initiatives.[90] In particular, where long-term programmes are embedded within communities, they may be ideally placed to respond to communities' evolving needs as risks change. This, of course, requires flexibility and the capacity of programmes to scale up and adapt according to risk, something that can prove challenging in practice (see Section 5.3).

Condition 6: An enabling environment for community-based early action

Another element of the Ethiopian famine prevention system's success lies in the cascade of EWI to the community level. The monthly early warning and response bulletin produced by the EWRD is distributed to the regional states, which are responsible for ensuring the information reaches the woredas, and in turn the kebeles.

Generally speaking, vulnerable communities can access EWI if it is made available to them through an official EWS, such as that of Ethiopia or the Bangladesh cyclone EWS (see Box 2.4) or if they generate the EWI themselves through a community-based EWS such as the Garba Tulla drought EWS (see Section 2.1.2).

But just as with national and international EWS, community-level EWI is a necessary but not sufficient condition for community-based early action. In particular, for communities to be fully empowered by EWI, they need:

- the capacity to respond and a basic level of preparedness, for example, contingency plans, decentralized access to resources, community-owned food reserves, etc.;
- the freedom to pursue appropriate response strategies.

86 Sida et al. (2012), p. 29.
87 Ibid.
88 Ibid.
89 Ibid., p. 28.
90 Paul et al. (2012).

The second can be a particular challenge for marginalized communities such as pastoralists in the Horn, for whom traditional coping strategies are increasingly unavailable. Drought is not a new risk, and pastoralist livelihood strategies have developed to cope with it. Central elements of coping strategies are herd mobility and management. When drought hits, pastoralist communities move in search of new sources of water and pasture for their livestock. When they expect herds to be adversely affected, communities may destock by selling some of their animals. Yet these options are increasingly unavailable to many pastoralist communities, which find their mobility constrained by restrictions on movement and declining availability of communal lands, and their ability to access markets constrained by restrictions on trade. As a result, their vulnerability to drought is increasing.

Declining pastoralist freedoms and the associated erosion of coping strategies mean the value of community EWI is diminished. One development practitioner interviewed for this research, working on community EWS in Kenya, was initially confounded by pastoralist responses to the question of how they would use EWI: she was told they would not do anything differently. On probing, she discovered that this was because the coping strategies they would seek to pursue if they knew a drought was likely were simply not available to them.

Communities should be the first responders, but to do so effectively they need more than EWI alone. NGOs and local authorities have an important role in working with communities to develop basic capacities and preparedness. But, crucially, government, through appropriate public policy, must also ensure an appropriate enabling environment for early action.

4. Early Warning and Early Action in the International System

Key messages

- Donors' political risk preferences are the primary determinants of early action in the humanitarian system.
- A lack of appropriate accountability and incentive frameworks means donor decision-makers do not see opportunity for reward in funding early action, but do see considerable downside.
- Diversity of early warning systems can lead to a weaker early warning signal where systems are not in perfect agreement. This can lead to delay.
- In developing response plans, agencies are incentivized to compete for funds rather than cooperate, resulting in conflict and delay.
- Agencies should optimize preparedness by undertaking regular audits to minimize lead times and reforming contingency planning.
- Development actors are often best placed to undertake the earliest actions. This requires development programmes that are more flexible and adaptable, and closer integration of humanitarian and development work.

In the event that national governments are unable or unwilling to fulfil their responsibilities as 'providers of first resort', then responsibility falls upon the international system as a 'community of providers of last resort'.[91] In this commonly occurring situation, there are six conditions that must be met for appropriate early action from the international system.

Importantly, the international system is not monolithic, but composed of numerous donors, UN agencies and international NGOs with unaligned priorities and often competing agendas. Coordination is complex, decision-making fragmented and accountability diffuse. These characteristics mean the necessary conditions for appropriate early action are almost never met simultaneously, with the result that some degree of delay is inevitable.

Condition 1: Clear early warning signal

In any single food crisis, there are likely to be multiple early warnings from different EWS. As discussed in Chapter 2, these are likely to have different primary users with different needs, and use different data sources and methods, ultimately producing qualitatively different EWI. This offers a number of advantages: it helps to meet the various needs of different users while the diversity of data sources and methods should provide a more robust conclusion drawn from a broader evidence base.

This comes at a price, however. Where EWS are difficult to reconcile, because they are not in full agreement or because the form of their outputs makes it hard to do so, the clarity of the overall early warning signal may be diminished. Even in the case of the 2011 Horn crisis, where numerous prominent EWS provided clear and adequate warning, the signal from some other EWS was less urgent,[92] which may have contributed to uncertainty in at least one major donor.[93]

91 This concept, proposed by Lautze et al. (2012), builds on the formal IASC designation of a cluster lead agency as the 'Provider of Last Resort', entailing a responsibility for the agency to do its 'utmost to ensure an adequate and appropriate response'. See Lautze et al. (2012) and IASC (2012).

92 Ververs (2012).

93 ICAI (2012).

Box 4.1: Early warnings and the 2012 Sahel crisis

There was still famine in Somalia when the first early warnings sounded of a potential food crisis in the Sahel. A poor harvest saw the president of Niger appeal for international assistance in October 2011, warning of a looming cereal deficit. WFP, UNICEF and a number of international NGOs quickly began to appeal for funds and undertake communications to raise public awareness in donor countries. Donors indicated strong early backing for Niger, in the words of one NGO worker 'almost a blank cheque'. In particular, the European Commission made a series of donations to fund early action and preparedness activities. NGOs and agencies were surprised at how quickly pledges to fund early action accumulated, with one NGO worker worried that the humanitarian community 'didn't ask for enough'.[94]

In early 2012, the European Commissioner for Humanitarian Aid and Crisis Response visited the Sahel, declaring 'nobody should have to live in fear of famine yet within months people will begin to starve unless we act'.[95] A month later, with the famine in Somalia declared over, an emergency high-level meeting was held in Rome to discuss a joint response to the situation in the Sahel. This was attended by the heads of WFP, FAO, UNDP and OCHA, plus the European Commissioner and assistant administrator of USAID and representatives from the African Union and ECOWAS. The press conference was told that lessons had been learned from the previous year's experience in Somalia. Immediately afterwards, the administrator of UNDP and the Under-Secretary General for the Coordination of Humanitarian Affairs visited Niger.

Although governments and agencies presented a united stance on the need for early action in the Sahel, privately there was disagreement about how severe the situation was likely to become. FEWSNET (which had called the situation in Somalia correctly the year before but had been largely ignored) pointed towards the capacity of regional markets to address local deficits and did not expect the situation to deteriorate past IPC Phase 3 – 'Crisis' in the worst-affected areas: still a grave situation for millions of people, but a level of food insecurity not atypical during the Sahelian lean season. Meanwhile, in areas of the Horn the situation remained more serious according to FEWSNET, at IPC Phase 4 – 'Emergency'.

This led to frustration for some humanitarians who felt that the emergency in the Horn had been forgotten, and that media and political attention had shifted disproportionately onto the Sahel. In the words of one donor staff member, while attention focused on the Sahel, the level of need in areas of the Horn remained so great that 'you cannot waste money there'. It also led to frustration, particularly towards FEWSNET, from those advocating a larger response in the Sahel.

Considerable efforts were made to reconcile differences in analyses regarding the situation in the Sahel, a process greatly facilitated by the existence of the IPC approach, which provided a common framework for discussion. However, the IPC will only remain useful for as long as it is used consistently. With politicians and agencies keen to demonstrate that they had learned the lessons of Somalia the year before, the temptation to bid up the severity of the Sahel crisis was clearly evident. Although the situation was not expected to deteriorate past IPC Phase 3 – 'Crisis', the European Commission and at least two major international NGOs evoked the possibility of famine in their communications.[96]

94 This trend was not to continue, however, and as the crisis evolved and humanitarian needs increased, a large funding gap opened up.

95 European Commission (2012a).

96 In a letter to supporters, World Vision CEO Kevin Chiu wrote, 'the latest estimate is that 13 million people are in need of immediate food aid to avert another life-threatening famine'. *Vision Voice* May/June 2012, Issue 89. On 5 August 2012, the *Independent on Sunday* newspaper published an interview with Oxfam GB ambassador Bonnie Wright, who had just returned from the Sahel, in which she said, 'We are now at a moment where we can prevent a famine.'

What some might consider alarmism would be justifiable to others if it helped to mobilize funding to meet humanitarian needs. But in the longer term overstatement threatens to erode the objectivity the IPC seeks to build. And while the political and media emphasis placed on the Sahel was justifiable – there was undeniably a widespread food crisis – the fact that it may have led to the marginalization of arguably greater humanitarian needs in the Horn is troubling, and deeply ironic given this emphasis originated from a wish to demonstrate that lessons had been learned from Somalia.

The larger issue is the persistent threat of livelihood crisis and structural malnutrition that coexist in large areas of both the Sahel and the Horn. In terms of early warning, this makes it harder to distinguish between another bad year and a disastrous one. In terms of programmes, it calls for the right mix of short-term humanitarian interventions and long-term development over time, but with a particular need for the latter to reduce chronic vulnerability. And in terms of communications and fundraising, it makes it difficult to communicate the complex nature of the situation and mobilize resources for what is, to all intents and purposes, a permanent crisis.

Ultimately, however, as numerous evaluations have found, the signal was clear enough to have triggered action much earlier in the process.[97] A more likely explanation is that decision-makers used the lack of uniformity in EWI as an escape hatch: an excuse to explain why action is not yet possible.

When the time came, there was certainly no lack of clarity about the declaration of famine: the IPC provided early warnings providers and agencies with a common framework to classify severity which expedited the process and avoided arguments about whether or not the situation constituted famine, as had happened on other occasions. The importance of a common food security classification framework became apparent again in 2012, when the attention of the international community turned to a growing crisis in the Sahel. But on this occasion there was greater discrepancy between EWS, requiring considerable efforts to reconcile differences in analysis (see Box 4.1). Some early action followed, but it is unclear how informed this was by an objective reading of early warnings. At least as important in triggering early action appears to have been the desire among donors and agencies to demonstrate that 'lessons had been learned' from Somalia, and an evolving media narrative that shifted from the Horn to the Sahel.

The IPC provides a framework for agreeing how a particular situation should be classified and a means to ensure comparability of output, so making consensus easier to achieve. The process of achieving consensus is likely to be faster through a recognized and formal approach rather than through ad hoc means. Such an approach could be triggered, for example, when assessments differ by one phase or more on the IPC scale, and be hosted by OCHA or the IASC. However, as Box 4.1 shows, sources of disagreement are not limited to methodological and data issues but also include extraneous factors relating to politics, media, campaigning and fundraising. Insulating technical discussions from these external agendas will be crucial to the success of any such process.

Condition 2: Appropriate accountability and appropriate incentives

Across the international system, a pattern emerges of weak accountability for preventing crises. Decision-makers often feel more accountable for other competing priorities. For example, in agencies, field staff may consider their primary responsibilities to be for the delivery of ongoing, 'business as usual' programmes or a balanced budget, either of which may be threatened by the need to respond to early warnings. In donor bureaucracies, decision-makers feel acutely accountable for not wasting taxpayers' money: a decision to release early funds for a crisis that did not materialize would be easily traceable and attributable, and probably career-limiting.[98]

97 For example Darcy et al. (2012a); ICAI (2012); Slim (2012).
98 Bailey (2012).

The lack of accountability is often compounded by highly centralized decision-making. This means that those responsible for taking a decision are among the furthest away from the unfolding situation and increasingly subject to competing agendas and claims on their attention.

In the absence of adequate accountability, incentives are skewed towards delay. Decision-makers perceive significant downside risk from early action, but no comparable downside risk from delaying a decision: people might expect to lose their jobs for wasting funds to avert a crisis that never happened, but they would not expect to be punished for waiting for certainty (by which point preventative action is no longer possible). The downside risks perceived by decision-makers are not counterbalanced by an opportunity for reward if a crisis is mitigated. Indeed, it may not be straightforward to prove that a crisis was averted, as opposed to having been overstated in the first place.[99]

So decision-makers are not incentivized to take calculated risks; there is no obvious reward for doing so, and no cover in the event that risk-taking does not pay off. The result is bureaucratic risk aversion. In this context, delay can be seen as a risk-management strategy on the part of decision-makers: by delaying decisions, asking for more information, or passing decisions on within the organization, they are managing the risks (to themselves) associated with early action. This strategy does nothing, however, to manage the risk of a crisis: this risk is recognized, but as a risk to others, not the decision-maker.

Highly centralized donor decision-making is also problematic in the context of weak communication between donor headquarters. While coordination and dialogue between donor staff in the field may often be good, it is a different story among home capitals. In the words of one aid professional, 'desk officers making funding allocations most likely have never met desk officers from another donor agency and don't even know their names or contact details'. This undermines accountability by creating a collective action problem: decision-makers may choose not to fund on the expectation that 'someone else will'.

4.2.1 Organizational accountability and incentives

Rather than a system of individual accountability, the humanitarian system is based on a system of organizational accountability. The cluster approach through which humanitarian agencies coordinate and organize themselves in crisis-afflicted countries identifies lead agencies for each sectoral cluster (e.g. health, nutrition, food assistance, livelihoods, etc.) that must act as Providers of Last Resort with a responsibility to 'do their utmost to ensure an adequate and appropriate response'.[100] However, organizational accountability is notoriously difficult to achieve, and it is highly questionable to what extent the Provider of Last Resort designation does so (see Box 4.2).

Agencies are not necessarily incentivized to cooperate. In fact, inter-agency turf wars are a common finding of response evaluations.[101] Agencies clash because they are encouraged to compete for scarce funds. They therefore develop response plans in isolation from one another, and base these on their perceptions of donor funding preferences and the need to achieve differentiation.[102] This leads to conflict and delay as agencies argue over appropriate strategies, and results in fragmented, project-based responses as disparate plans are aggregated rather than integrated.

There are steps that can be taken to improve agency incentives to cooperate. For example, agencies and donors could agree common baselines specifying when particular interventions are warranted, to provide a basis for reaching consensus; donors could provide seed funding for inter-agency planning in response to initial early warnings, favour joint proposals over individual agency proposals or even make partnership a funding criterion.

However, improving organizational accountability is more challenging. Lautze et al. (2012) propose 'executive accountability', by which a 'single, identifiable person

99 Ibid.
100 IASC (2012).
101 Bailey (2012).
102 See, for example, Maxwell et al. (2012). Also see Darcy and Hofmann (2003).

within each organization assumes full responsibility for the organization's responsibilities as a Provider of Last Resort'. These individuals would then have to demonstrate that the organization had taken 'all measures necessary to mobilize political, technical, logistical and financial resources based on early warning information'. Failure to do so would entail punitive measures, extending to removal from office in the most serious cases.

Box 4.2: Organizational accountability during the 2011 Somalia famine

The notion of a Provider of Last Resort was put to the test in Somalia during 2011 and found wanting. As the UN agency primarily responsible for the provision of food aid, WFP was the leader of the Food Assistance Cluster and as such the designated Provider of Last Resort. But WFP was forced to withdraw from South Central Somalia – the area eventually affected by famine – in January 2010. In the wake of repeated attacks on its staff and in anticipation of a forthcoming report by the UN Monitoring Group alleging significant diversions of WFP aid, the agency's continued presence became untenable. Remarkably, WFP's decision to withdraw was not discussed with the Somalia Humanitarian Country Team. Shortly after WFP suspended operations in South Central Somalia, it was banned from returning by al Shabaab, the *de facto* authority in the area.

WFP continued to lead the Food Assistance Cluster while operationally absent from South Central Somalia, remaining the food Provider of Last Resort despite its apparent inability to fulfil this responsibility. The collapse in operational capacity that followed WFP's withdrawal resulted in a significant food deficit in the country, contributing to the risk of famine. During this time, it appears that Food Assistance Cluster meetings convened by WFP were infrequent at best: there were no meetings during the last five months of 2010 when initial early warnings began to accumulate, and only two meetings in January and February of 2011, with no further meetings until just before the declaration of famine in July.

Evaluations also indicate that other agencies felt WFP pushed its own in-kind food aid agenda within the cluster and discouraged debate about alternative strategies such as cash or voucher-based programmes. WFP's preference for in-kind food aid is a direct result of its incentives: WFP country offices receive a small base income plus a margin on the value of food aid delivered through their pipeline. As such, WFP country offices are encouraged to prioritize in-kind food aid over cash interventions, as the former delivers greater resources, staff numbers and scale. What is more remarkable is that WFP continued to argue against cash programmes even after it had withdrawn from South Central Somalia. This led to protracted debates about how to respond to the escalating emergency which continued until the declaration of famine eventually forced the issue and cash programmes were initiated.

Despite its designation as Provider of Last Resort, WFP appears to have operated in Somalia with weak accountability for fulfilling this role: evaluations indicate the cluster functioned poorly, that WFP was seen to prioritize its own agenda and that it struggled to maintain effective working relations and lines of communication with other agencies and partner organizations. More fundamentally, the humanitarian system appears to have been unable or unwilling to address the situation, despite the fact that WFP's withdrawal called into question its basic ability to act as a Provider of Last Resort.

It is important to note that since the famine in Somalia, WFP has worked to address many of the problems identified by evaluations regarding its relations with other agencies in the country. In particular it has agreed a Joint Plan of Action with UNICEF to clarify roles and responsibilities on nutrition interventions, and has begun a joint initiative with FAO and UNICEF on resilience. The Food Assistance Cluster has been merged with the FAO-led Livelihoods Cluster to form a Food Security Cluster, co-led by the two agencies.

Sources: Chatham House research, Darcy et al. (2012a) and WFP (2012a).

Such an approach raises a number of questions. Might the focus on penalties, rather than rewards, incentivize accountable executives to overreact to early warnings as a means to cover themselves? Or might it create a preference for executives to work in organizations not designated as Providers of Last Resort? The idea to focus on individual accountability is right, but ideally reforms would extend beyond those agencies leading clusters to all major agencies (including international NGOs) and key intermediators such as Humanitarian Coordinators. And measures to increase accountability should be combined with incentive frameworks that reward appropriate early action as well as penalizing inappropriate delay.

Condition 3: Operational presence and capacity

To deliver preventive interventions at scale, implementing agencies must have sufficient physical presence, in terms of staff and resources, in the area where needs exist or are expected to arise. And they must have adequate and appropriate capacity, in terms of infrastructure, knowledge, skills and expertise to deliver the programmes needed. Note that the most appropriate implementing agencies are not necessarily major international NGOs and UN agencies. They may be national or local authorities, local NGOs, community organizations or faith-based actors. However, in the event that these actors are absent or lack sufficient capacity or resources, then international actors are likely to be needed.

In short, where an emergency response is likely to be necessary, then the right agencies, with the right set of capacities, need to be operational in the right areas in good time. When this is not the case, time will be lost building operational presence and capacity. More fundamentally, a continued lack of operational presence in an at-risk area can lead to problems if agencies become removed from the situation on the ground. This was an issue in Somalia, for example, where security risks meant agencies maintained a low operational presence within the country and were unable to perform needs assessments or other monitoring activities. As a result many staff were unaware of how bad the situation was becoming.[103]

The ultimate objective of early action should not be to prepare for an emergency response, but to avoid the need for one. This requires early interventions to protect livelihoods and build resilience, which is not necessarily something that humanitarian agencies have the operational capacity to deliver. More usually, this would demand the operational presence and capacity of development actors and the existence of long-term, livelihood-based programmes that can be revised, adapted and scaled in response to early warnings.

This is not to say that early action is the sole responsibility of development actors. In circumstances such as conflict-affected regions, development actors may lack sufficient operational capacity as compared with their humanitarian counterparts. In other instances, aid effectiveness principles may actually prevent donors from funding development actors if doing so would mean allocating funds to a non-partner country (see Section 6.1). More fundamentally, the capacity to anticipate and mitigate a crisis through the protection of livelihoods and the capacity to prepare for and deliver a timely emergency response should not be considered in isolation from each other. Rather, they should be seen as two ends of a programme continuum linking long-term development to short-term humanitarian interventions. This demands closer, more effective working between humanitarian and development actors to develop integrated programme approaches.

4.3.1 Preparedness

There is no single definition of preparedness. Organizational definitions often combine elements of what preparedness is, with what it seeks to achieve, with lists of preparedness activities. The UNISDR provides a useful definition of preparedness as 'the knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions'.[104]

103 Darcy et al. (2012a).

104 See http://www.unisdr.org/we/inform/terminology#letter-p.

Preparedness activities can optimize operational presence and capacity: ensuring that the appropriate resources, knowledge, infrastructure and plans are in place given the particular risks faced and likely needs of affected populations. For example, agencies and donors are increasingly using EWI to inform decisions about where to pre-position stocks of food, equipment and medicine in anticipation of crises. Such activities formed a significant component of early action during the 2012 Sahel crisis.

Very often there is a significant amount that agencies and donors can do to maximize preparedness beyond pre-positioning of supplies. Research by Levine et al. (2012) examining the preparedness of agencies operating in the Horn found that lead times for interventions could potentially be shortened from periods of three to five months to a few days or weeks, simply by analysing the tasks involved in starting up a response and identifying those that could be done in advance. The authors proposed that agencies undertake regular 'preparedness audits' to ensure start-up tasks do not accumulate.

Contingency plans form a crucial component of preparedness. Their purpose is to consider potential scenarios for which agencies should be prepared and identify appropriate responses. This should expedite future decision-making and help identify the tasks involved in managing the particular risks faced. By having contingency plans in place, agencies and donors should be able to mobilize faster in response to early warnings or changes in circumstances.

Yet where they exist, contingency plans are often ignored and sometimes they are not produced at all. Evaluations of the 2012 Horn response found that implementation of contingency plans in Kenya had been 'patchy',[105] while the Somalia response was undermined by an absence of contingency planning, which meant key risk factors such as the *La Niña*-related drought and agency expulsions from South Central Somalia were not properly planned for or managed.[106]

Dysfunctional planning processes mean that agency staff are reluctant to engage in contingency planning and explain the tendency for plans to be ignored. Documents are typically produced annually using generic scenarios such as 'drought', 'flood' or 'conflict'. This means plans are unable to incorporate real-time changes in risk factors, and the generic scenarios produce generic strategies. The result is plans that are often of little relevance and processes that staff consider a waste of time and resources.

Agencies and donors need to move towards models of dynamic contingency planning such as those used in the military or civil contingencies departments (Box 4.3). Key elements would include:

- risk factors and scenarios derived from a holistic assessment of risks, including political, economic, environmental and programmatic risks;
- live documents that are continually revised to reflect new EWI and changes in key risk factors;
- hard-wiring of plans for early action: specifying risk-based triggers and detailing actions to be undertaken in advance of an emergency as well as in response to one;
- clear accountability, identifying who is responsible for doing what, by when.

Box 4.3: Lessons from contingency planning in the military

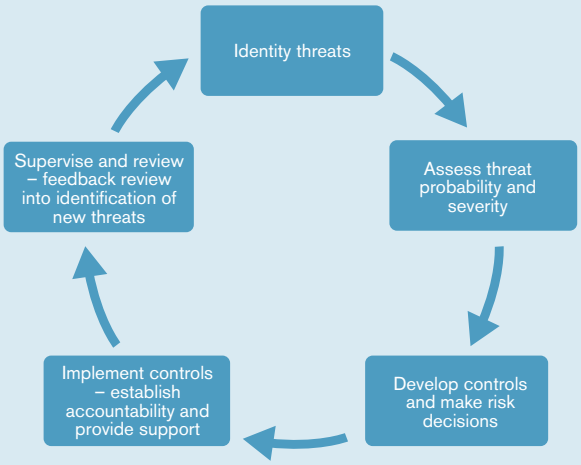
The military and security sectors offer a number of examples of early-warning and risk-based contingency planning. These include 'Warnings and Indicators' (W&I), continuous or cyclical operational planning and war-gaming simulations to test contingency plans and improve decision-making process.

In assessing the risk of conflict, military and security analysts commonly identify W&I to inform intelligence-gathering and monitoring efforts. While these have not been particularly successful at identifying unexpected or novel threats, they have been highly successful in providing a common baseline for discussion of risk across relevant government, security and military actors and contributing to a culture of inter-agency cooperation.

105 Darcy et al. (2012b).
106 Darcy et al. (2012a).

In the operational environment, the United States military uses a cyclical approach to manage risk. Military planners and commanders identify hazards, assess threats, determine levels of risk and develop and implement controls. Supervision and review of these measures then feeds back into a continuous process of planning, review, lessons learned and operational improvement.[107]

Figure 4.1: Cyclical or 'dynamic' risk management in the US military



Source: Adapted from Mabey et al. (2011).

In general, Western militaries place a significant emphasis on contingency planning and preparedness. Common elements include a culture that emphasizes planning as an essential activity, a dynamic portfolio of specific contingency plans and defined metrics for preparedness or 'readiness'. Armed forces practise these plans through regular 'exercises', which are seen as a central part of their duties. These are used to train participants, evaluate performance, equipment and preparedness and to identify shortcomings. Importantly, exercises also help to build habits of cooperation and communication, and for this reason Western militaries are increasingly mounting joint exercises with their civilian counterparts, such as government departments, development agencies and emergency services.

War-gaming offers a technique for building consensus on risk and strategy through structural or free-play simulations.[108] For example, in 'red teaming' simulations, subject-matter experts act as adversaries to provide independent peer review of contingency plans and processes to test assumptions, detect vulnerabilities and offer alternative views of scenario-building.[109] Unlike linear planning processes based on simple scenarios, 'high engagement games' can help decision-makers build adaptive capacity by confronting them with unpredictable situations and allowing them to ask questions and test different approaches. These exercises also help staff from different agencies to build trust and form effective relationships.

Importantly, it is widely recognized within the military that these processes do not by themselves guarantee success. Plans on occasion may still be poorly designed or implemented, or possibly ignored by decision-makers for political or other reasons. Nevertheless, armed forces invest considerable time and resources in such processes because they believe they generate significant returns in the long run, not least through important spillovers such as common understanding of risk, improved cooperation and trust, greater adaptive capacity and a culture of readiness.

Sources: Chatham House International Security Department; Perla et al. (2011); Longbine (2008).

107 Air Land Sea Application Center (2001), cited in Mabey et al. (2011).
108 Mabey et al. (2011).
109 Longbine (2008), cited in Mateski (2009).

Condition 4: Conducive relations with national or local authorities

The ability of agencies and their partners to reach affected populations with preventive interventions is dependent upon access being granted by the relevant authorities. This will most usually come from official authorities such as national or local government, but in the case of complex emergencies access must be granted by all major belligerents on the ground.

The poor relations of Western donors and the UN with al Shabaab, the effective administration in South Central Somalia, resulted in a serious loss of access for many UN agencies and international NGOs in the run-up to the 2011 famine. Western donors and the UN were in explicit opposition to al Shabaab and supported the TFG, with which al Shabaab was at war. This is likely to have been a major contributing factor to al Shabaab's decision to ban WFP and subsequently expel a further 16 UN agencies and international NGOs. Access was maintained by a number of agencies operating largely outside the UN-led cluster system,[110] but the expulsion of so many major agencies severely constrained the potential for early action. Indeed, some analysts argue that even if resources had been mobilized earlier, the lack of humanitarian access in Somalia meant that famine may still have been unavoidable.[111]

In contrast, constructive relations between the national government of Ethiopia, agencies and donors mean there is an effective process for managing food security. A national-led partnership with donors, UN agencies and international NGOs sees collaboration and cooperation on generation and monitoring of early warnings, needs assessments, resource mobilization and aid delivery.

Even where relations are good, national politics may still hinder the ability of agencies to respond. In these circumstances, smart engagement with governments and quiet diplomacy can help create the space for action. As explored in the previous chapter, despite the existence of an effective EWS in Ethiopia with strong support from donors and agencies, there is a tendency on the part of the government to understate needs. In the 2011 crisis, the UK and other donors encouraged the government to acknowledge the shortfall and increase resources.[112]

Another example is provided by the efforts of UN agencies and donors to convince the Senegalese President, Abdoulaye Wade, to take action to deal with a looming food crisis in 2012. Needs assessments indicated 800,000 people facing food insecurity; however, Wade, preparing to fight an election, was reluctant to acknowledge the situation for fear it could expose him to political criticism. In the end, donors and agencies convinced him they should be allowed to provide assistance without public fanfare.[113]

Condition 5: Conducive donor politics

Early action ultimately depends on early funding, and this for the most part depends upon donor governments, the decisions of which are largely informed by domestic and foreign policy agendas (see Box 4.4). If donor governments perceive early action to be in their political interests, bureaucratic risk aversion becomes irrelevant. As such, donor politics are the single most important factor in determining donor response. More often than not, however, donors' political risk preferences reinforce bureaucratic risk aversion rather than overriding it.[114]

Domestically, budgetary constraints and declining public support for aid increase the political risks of funding early action: in the absence of a high-profile disaster relayed by the broadcast media, sceptical publics may punish politicians for spending taxpayers' money on a crisis that is to all intents and purposes invisible and may not even happen.

110 Darcy et al. (2012a).
111 Menkhaus (2012). Also see Hammond and Vaughan-Lee (2012).
112 ICAI (2012).
113 Melly (2013).
114 For a detailed discussion of how domestic and foreign policy factors shape political decision-making in donor countries, see Bailey (2012).

Box 4.4: Donor politics and humanitarian aid

The literature shows that donors consider both domestic political and broader geopolitical risks and opportunities when deciding whether to provide emergency relief, and how much:

- Analysis of US emergency assistance found that larger budget deficits make a decision to grant relief less likely owing to political concerns that taxpayers may punish politicians for 'big ticket' aid spending during times of fiscal strain.
- On the other hand, increased US media coverage makes a decision to grant emergency aid more likely and has a major impact on the size of allocation, with one *New York Times* article being worth more American aid than 1,500 deaths.
- The same analysis found that the US was most likely to grant aid to geopolitical allies.
- Donors are more likely to favour countries that are geographically close.
- In general, donors are more likely to provide humanitarian assistance to countries with which they share a language or colonial history.
- Oil-exporting countries are more likely to receive humanitarian assistance than oil importers.

Sources: Drury et al. (2005); Eisensee and Strömber (2007); Fink and Redaelli (2009).

The domestic media therefore shape the political risks associated with funding decisions. By raising public awareness of a disaster and creating a demand for governments to act, they can increase the downside risks associated with inaction while creating rewards for action. However the media cannot be relied on to help trigger an early response because the so-called 'CNN effect' depends on images of suffering not available before an emergency.

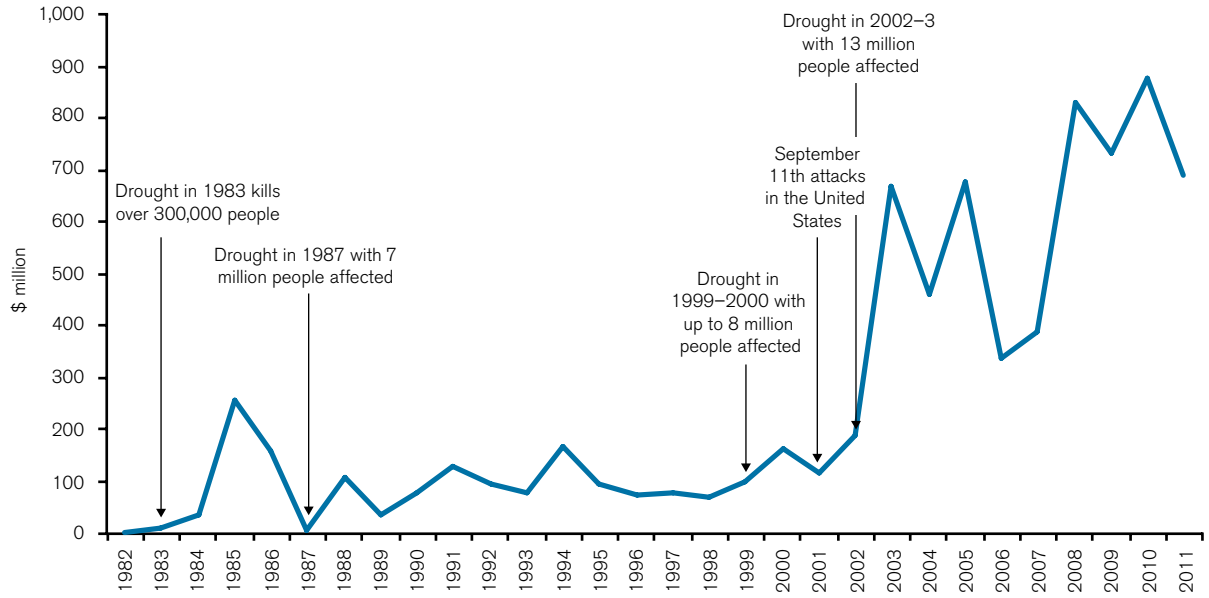
While domestic political risk factors are unlikely to encourage early action, geopolitical risks may. The donor response to the 2003 food crisis in Ethiopia was significantly faster and more decisive than the one in 2000. The principal explanation for this is that following 9/11, the Horn of Africa had become a front in the Global War on Terror, and Ethiopia had become the West's key ally in the region. Ethiopia's history of famine-associated regime change meant the crisis presented significant geopolitical risks to Western donors, and early action provided a means to minimize these risks. The engagement of Western donors, particularly the US, in Ethiopia has remained strong, creating the enabling conditions for the effective partnership between the Ethiopian government and the humanitarian system described above. Figure 4.2 shows how US aid to Ethiopia has increased after 2001.

Donor management of geopolitical risks does not necessarily lead to early action, however. In Somalia, it has prevented it. Attempts by donor governments to manage the risks associated with humanitarian aid being captured by the armed Jihadist group al Shabaab saw a plethora of laws and initiatives that constrained the ability of humanitarian agencies to operate in Somalia. In particular, US legislation meant that agency staff could have been liable to prosecution in the US and up to 15 years in prison should the aid they were delivering be diverted to al Shabaab. These legal constraints were accompanied by onerous reporting requirements for agencies and their partners, and a significant decline in aid, which fell by half between 2008 and 2011.[115]

By withdrawing aid and constraining the ability of agencies to operate and respond, donor management of the geopolitical risks associated with al Shabaab made famine in Somalia more likely. A further consequence was the loss of humanitarian access described above, as relations with al Shabaab became impossible for agencies seen to be associated with the West.

115 Pantuliano et al. (2011).

Figure 4.2: Official development assistance from the United States to Ethiopia, 1982–2011



Source: OECD-DAC Database, available at http://stats.oecd.org/qwids; CRED, available at http://www.emdat.be/.
Note: Constant 2010 prices used for comparison.

Condition 6: Adequate funding arrangements

A common complaint among implementing agencies is that funding for early action is unavailable or hard to access, even in circumstances where donor politics are not problematic. An important explanation for this is the lack of appropriate incentives for donor officials to fund early action. However, NGO and UN staff commonly point towards a lack of appropriate financing mechanisms and inflexible funding procedures. For example:

- a lack of dedicated funding lines or financing mechanisms for preparedness activities;
- criteria for emergency assistance that restrict the ability to fund early action, such as the need for a crisis to have been declared by national government, the need to demonstrate funds will be used to save lives or the need for interventions to be limited to a short time-frame;
- slow decision-making procedures and burdensome application processes;
- a lack of rapid access funding lines and contingency funds;
- a lack of mechanisms for revising, adapting or scaling long-term development programmes.

These issues are examined in detail in Chapter 6. The picture is mixed. While there is certainly more that donors can do to improve flexibility and access across development and humanitarian lines, there is also a growing list of initiatives and innovations on the part of donors to do so.

5. Early Warning, Risk and Resilience

An EWS is a risk management tool: it helps decision-makers in governments, agencies or communities assess the risks of food crisis and make judgments about appropriate interventions to avert it. Yet, as Chapters 3 and 4 showed, this process does not necessarily generate early action. This chapter argues that the fundamental barriers to translating early warning into early action arise from misaligned risk preferences and an associated lack of appropriate risk management frameworks.

Key messages

- Donor and national governments seek to balance political risks and humanitarian risks in deciding whether to respond to early warning. They tend to emphasize the former at the expense of the latter, resulting in suboptimal outcomes.
- Government subordination of humanitarian risks to political risks means agencies are forced to assume new financial, reputational and operating risks. This hinders the ability of agencies to manage humanitarian risks and respond early.
- Reforms are needed to more closely align humanitarian risks and political risks so that governments have incentives to achieve 'win–win' outcomes.
- The concept of resilience provides an important opportunity to shift development thinking towards a new paradigm more appropriate to a future of increasing uncertainty and risk. Early warning and early action are fundamental to the central notions of anticipation and adaptation.
- The international system should seek to develop the qualities of a high reliability organization: engender a culture of appropriate risk management, overcome silos, decentralize decision-making, incorporate redundancy and increase the capacity of the system to scale, adapt and respond to a changing risk environment.

5.1 Government risk perceptions

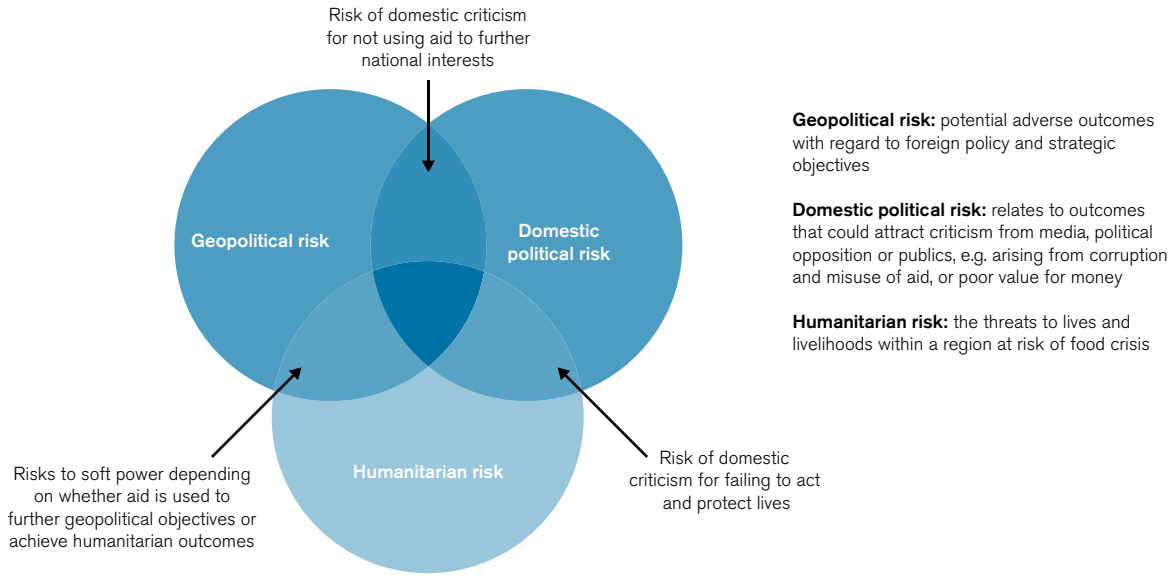
When considering early warnings, governments in both donor countries and affected countries tend to place particular emphasis on political risks relative to what might be termed humanitarian risks – risks to lives and livelihoods. Furthermore, government strategies to manage political risks are often at odds with strategies to manage humanitarian risks, with the result that early action is inhibited.

5.1.1 Donor government risk perceptions

Figure 5.1 illustrates the risk trade-off for donor governments. Broadly speaking, donor governments are concerned with two sets of political risk: geopolitical risks, relating to their foreign policy agendas; and domestic political risks, relating to potential political costs arising from criticism by the media, political opposition or national civil society and the public.

The cases discussed in Chapter 4 illustrate how donor governments often subordinate humanitarian risk to these political concerns. For example, the inertia of Western donors in the run-up to the 2011 Somalian famine can be understood as a strategy to manage geopolitical risks: proximately, the risk of aid resources being captured by al Shabaab; more broadly, risks to their anti-terror strategy within the Horn of Africa. When famine was declared and domestic attention shifted to the humanitarian situation in South Central Somalia, the political risk calculus of donor governments shifted. The significant release of funds that followed can be understood as a strategy to manage domestic political risks – specifically, to avoid

Figure 5.1: Donor government risks



criticism for failing to respond to a humanitarian catastrophe. Other examples of donor inaction as political risk management include the 2002 Malawi crisis (to manage the domestic political risks associated with corruption and misuse of aid) and the 1991 Sudan crisis (to manage the geopolitical and domestic political risks associated with providing aid to a government critical of the first Gulf war).[116]

When it occurs, donor early action is more likely to be part of a strategy to manage political, rather than humanitarian risk, as was the case with the rapid response to Ethiopia's 2003 crisis in the wake of 9/11.

5.1.2 National government risk perceptions

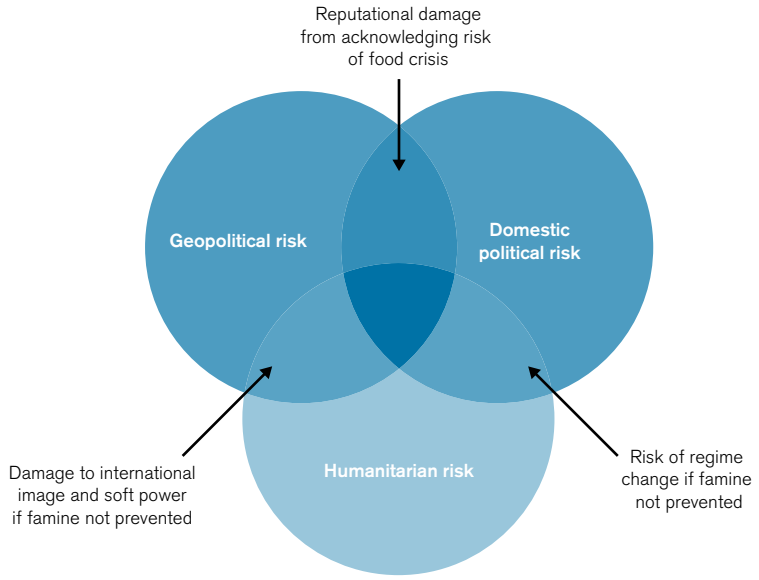
Governments in countries at risk of food crisis also face the same broad categories of risk, although the specific concerns will, of course, be different from those of donors. Again, the cases discussed in Chapter 3 illustrate the trade-offs national governments make in trying to manage these risks collectively. For example, the Ethiopian government's apparently contradictory behaviour can be understood as a strategy to balance humanitarian, geopolitical and domestic political risks. The government's significant investment in early warning and response capacity reduces the humanitarian risk of famine and the associated domestic political risk of regime change. Meanwhile, its interference in twice-yearly needs assessments is a strategy of reputational risk management: to avoid undermining the powerful narrative of national progress on which the government's domestic legitimacy is partly based and on which its international reputation (and attractiveness to donors and investors) also partly depends.

The reluctance of national governments to acknowledge (and therefore properly manage) humanitarian risks for fear of adverse political outcomes is not unusual. It was apparent in Niger under the government of Mamadou Tandja and explained the refusal of the state government of Bihar to declare a famine before Indian elections in 1967.

Strategies to manage domestic political risks can also have suboptimal outcomes where humanitarian risk is concentrated among a particular group. Governments may be less responsive to the humanitarian needs of regions, ethnic groups or religious groups where they lack political support, or where preventive action may

116 Buchanan-Smith and Davies (1995).

Figure 5.2: National government risks



Geopolitical risk: potential damage to relations with donors and the international community, to global perceptions of the country or to regional or global strategic objectives

Domestic political risk: relates to outcomes that could attract criticism from media, political opposition or publics, e.g. for allowing a food crisis to unfold, or for failing to deliver on promises to reduce vulnerability to crises; also includes domestic political economy factors

Humanitarian risk: the threats to lives and livelihoods within the country

necessitate transfers from politically more important groups or areas. Examples of political economy already described in this report include the Sudanese government's refusal to provide assistance to starving rural populations in 1988 while suppressing food prices in Khartoum, and the unresponsiveness of the Kenyan government to the plight of pastoralists in the northern drylands during 2011.

5.1.3 Implications for humanitarian agencies and vulnerable populations

Donor strategies to manage political risks often transfer risk to implementing agencies, hindering their ability to operate and address humanitarian risks. For example:

- Donors' anti-terror legislation made agency staff operating in Somalia in the run-up to the 2011 famine liable for the risk of aid being captured by al Shabaab; onerous donor reporting requirements further constrained the ability of agencies to operate.
- Bureaucratic risk aversion follows from the domestic political risk of 'wasting' taxpayers' money. This has led to a focus among donors on demonstrating value for money, and in particular on results-based aid. This may lead to reluctance to fund new approaches where impacts may be unproven or hard to demonstrate in the near term.
- Bureaucratic risk aversion trickles down from donors to agencies, as agencies seek to accommodate donor preferences and avoid becoming scapegoats.[117] Interviewees for this research frequently identified a 'compliance culture' as a constraint on early action within agencies, particularly those of the UN. This is typified by the promotion of staff who 'never rock the boat' but actually demonstrate few true leadership qualities and are unlikely to instigate early action themselves.
- Bureaucratic risk aversion may be highest for development spending; donors appear to be more tolerant of risk-taking and failure in humanitarian spending.[118] This is problematic for early action, as agencies delivering long-term development programmes may often be better placed to respond first with early interventions to protect livelihoods.

117 OECD (2012a).
118 Ibid.

- Bureaucratic risk aversion also results in a reluctance to fund early action: a common complaint of humanitarian agencies is that they struggle to access funds at the initial stages of a crisis. Delay is, in essence, a donor political risk management strategy. In some cases, agencies have assumed this risk themselves, underwriting preparedness activities from their own funds and seeking to recover the costs *ex post*.[119]
- Early funding is hampered by a donor collective action problem, where donor decision-makers in home capitals take a 'wait and see' approach in the hope that another donor will provide early funding and assume the associated risks. When donors take this approach en masse, the risks remain with agencies, national governments or the vulnerable communities themselves.

Implementing agencies can also find themselves constrained by national government risk management strategies, particularly because the agencies' permission to operate within an affected area must be granted by the government. When the Ethiopian government revised down food aid needs in the draft 2011 HRD, agencies planned accordingly even though many staff harboured concerns about the reliability of the estimates. More broadly, restrictions on NGO activities within Ethiopia mean agencies eschew advocacy in order to preserve their licence to operate, accepting the constraints imposed on them by the government's political risk preferences.[120]

In sum, the subordination of humanitarian risks to political risks by governments means agencies are forced to assume new financial, reputational and operating risks. This in turn hinders the ability of agencies to address humanitarian risks, which remain with vulnerable communities.

5.2 Towards better risk management

It is right that governments manage political risks. The real question is how political and humanitarian risks can be more closely aligned so that governments are incentivized to achieve 'win–win' outcomes – effectively moving government risk preferences towards the centre of the diagram in Figure 5.1 and Figure 5.2. Below we consider some basic principles to help achieve this.

5.2.1 Better management of donor government risks

Recognize that risk management is not the same as risk minimization

The preceding discussion has focused on strategies to reduce or minimize risks, but good risk management is more nuanced. Risks are typically tolerated in expectation of a return or benefit. Myopically seeking to reduce risks without paying sufficient attention to the potential benefits of assuming some level of risk may narrow options and undermine efforts to achieve programme objectives.

Good risk management involves taking informed decisions to strike an appropriate balance between risk and return. Preventing famine involves donors and agencies taking some degree of risk – identifying and undertaking appropriate investments in conditions of uncertainty.

Donor governments should be clear and open about these risks, and why they think they are worth taking in order to achieve the humanitarian and developmental objectives to which they are subscribed. A greater appetite for early action and preparedness could be incorporated into their strategies and communicated to publics. Buy-in could be sought through relevant political institutions such as parliament. This approach has been found to work for high political risk spending in fragile and transitional states. The government of Canada developed public indicators for its spending in Afghanistan and reported regularly to parliament on progress and challenges. This was found to be an effective way to manage domestic political risks and engage the public and political opposition.[121]

Be sensitive to political risks

Agencies and early warnings providers need to better understand the risk preferences of donors and be more responsive to their particular needs. Political risk considerations mean

119 Bailey (2012).
120 Mosley (2012).
121 OECD (2012a).

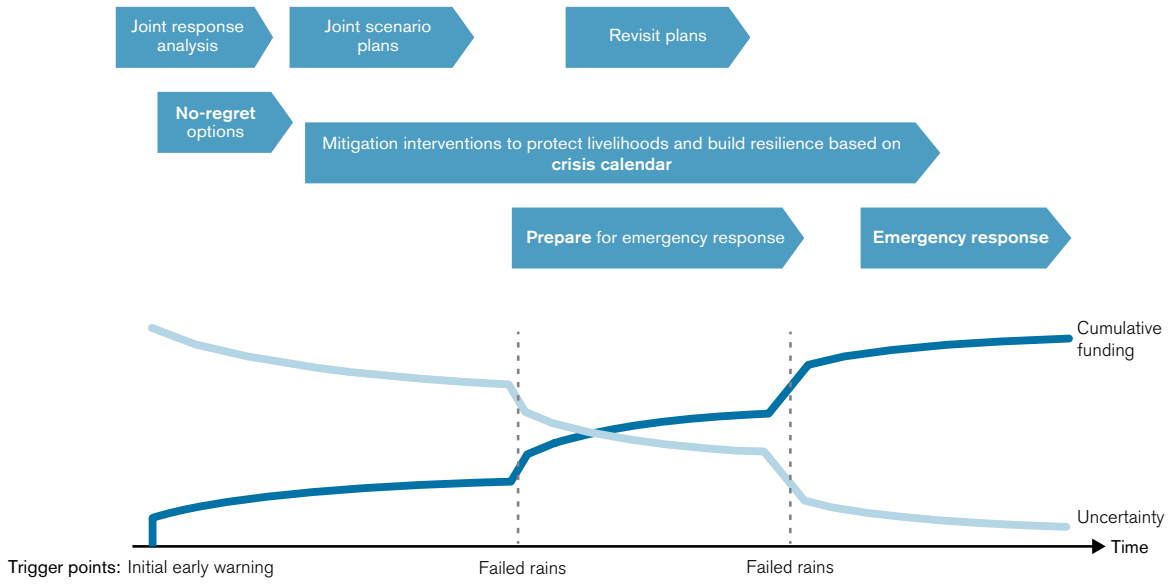
that donors are particularly concerned with saving lives and so are more responsive to outcome indicators such as mortality than to risk factors such as weather forecasts or food prices, or less specific metrics such as 'numbers at risk of food insecurity'. Therefore, early warnings providers should develop methodologies to forecast outcome indicators such as mortality and malnutrition rates, so that donors can assess risk in their own terms. These forecasts could also provide a baseline against which to assess the life-saving impacts of early action, so that donor governments can be more easily rewarded for the appropriate release of early funds.[122]

Agencies need to construct a compelling case for funding early action. Empirical analyses that demonstrate how early action can save lives and protect livelihoods will help reduce some of the risks perceived with early funding. Similarly cost–benefit analyses (CBAs) that demonstrate the economic rationale for early action can help donors manage the risks associated with ensuring value for money (see Box 5.1). CBAs for drought risk management and famine prevention are scarce but indicate attractive returns on investment, albeit from a small and incomplete evidence base. More rigorous analyses are needed to strengthen the economic and humanitarian case for early action. Importantly, this begins with better data collection and monitoring and evaluation of emergency and preventive interventions.

Finally, agencies must tailor their response plans to donor risk preferences. Uncertainty is greatest at the initial stages of a crisis, when the first early warnings are triggered. Donors cannot be expected to release significant funding at this stage; instead plans should prioritize no-regret options: interventions that deliver a return whether or not the crisis eventually materializes. As time passes, uncertainty will decrease; more robust early warnings and needs assessments will build donor confidence and inform further interventions. Plans could identify specific trigger- and decision-points when step changes in funding and response may follow, for example, in response to second failed rains. An illustration is provided in Figure 5.3, in which initial early warnings trigger the release of 'seed' funding for joint-agency response analysis.

Agencies and donors should agree triggers carefully, however. While a pre-agreed trigger may provide greater assurance of early action, it does not necessarily guarantee that the action will be appropriate (see Box 5.2).

Figure 5.3: Phasing a 'risk-sensitive' response



Source: Adapted from Bailey (2012).

122 Bailey (2012).

Box 5.1: Cost–benefit analysis

Early action can be unattractive to donor decision-makers because it presents upfront, certain costs in return for delayed and uncertain benefits. This is true for the whole spectrum of early action, ranging from longer-term interventions to reduce or mitigate risks through to near-term preparedness measures. CBA provides a tool to help decision-makers evaluate this proposition. It estimates the present values of a project's costs and benefits over a suitable time horizon and generates a simple benefit–cost ratio.

The concept is straightforward but the practice is not. Estimating a project's benefits can be difficult, so in practice CBAs are often conducted retrospectively when the benefits are more easily assessed. Decisions about whether to include (and how to monetize) non-market outcomes such as mortality, education and health benefits can have significant impact on the overall result, as can value-based judgments about the appropriate discount rate and time horizon.

CBAs are also highly context-specific. They depend on the frequency and severity of the hazard considered, the interventions modelled and the beneficiaries in question. So, for example, investment in irrigation to help corn farmers in the US Midwest manage drought risk is a completely different proposition from supporting commercial destocking and emergency veterinary care to help pastoralist herders cope with drought in the Horn of Africa.

Across all hazard types, flood risk prevention seems to have attracted the most CBA, and the weight of evidence suggests that, on average, the benefits of investing exceed the costs of doing so.[123] The evidence base for drought risk is far less complete, but indicative of a positive return on investment. One study of drought risk management in India estimated a benefit–cost ratio of around 2:1 (i.e. for every dollar spent, two dollars of benefits could be expected) based on expanding access to irrigation and crop insurance.[124] An analysis of commercial destocking for herders in the Moyale district of southern Ethiopia estimated a benefit–cost ratio of 41:1.[125] A broader study examining the impacts of a community-based drought risk reduction project in Malawi included benefits to crop and livestock production as well as mortality and educational improvements; it estimated a ratio of 24:1.[126] Most recently, an analysis carried out for the UK Department of International Development estimated benefit–cost ratios of 2.9:1 and 2.8:1 by comparing the costs of spending on resilience-building measures with the benefits of avoided aid, reduced animal losses and broader development outcomes in regions of Kenya and Ethiopia respectively.[127]

Agencies, and in particular NGOs through public campaigns and advocacy, must also consider how they can most effectively tilt the donor political risk calculus in favour of early action by increasing the downside risks of delay and increasing the upside for prevention. In particular, NGOs must be prepared to reward governments that fund early action with public praise, and shine a light on those that are slow to respond.

Develop a culture of risk management

Ultimately, for donor governments to take appropriate risks decision-makers must feel enabled to do so. Yet as Chapter 4 showed, decision-makers are not encouraged to take appropriate risks; instead they are incentivized to avoid them. Even though many donors claim to encourage risk-taking, this is not institutionalized through incentive structures.[128] Elements of a risk management culture include:

123 Foresight (2012).
124 Mechler et al. and the Risk to Resilience Study Team (2008).
125 Abebe et al. (2008).
126 Cabot Venton and Siedenberg (2010).
127 Cabot Venton et al. (2012).
128 OECD (2012a).

Box 5.2: Triggers for early action

A common prescription for strengthening the link between early warning and early action is the use of triggers, whereby an early warning signal would automatically initiate an action or activity. The attraction of this approach is that it effectively mechanizes decision-making, insulating it from political influence and bureaucratic risk aversion. For this to work, two key parameters must be agreed beforehand: the trigger point, in terms of EWI; and the action to be triggered.

In an ideal world, a programme of predefined early interventions could be triggered to halt a gathering food crisis in its tracks. However, identifying the right suite of early interventions for a particular situation requires a thorough needs assessment and process of response analysis – the optimal programme of early action cannot be fully known in advance. An alternative is to trigger the release of funds, although a donor commitment to fund unspecified future activities is fundamentally at odds with donor risk preferences.

More realistic triggers are likely to be more modest: potentially opening an early action funding window for a particular donor or pooled fund, or triggering (and releasing a small amount of funding for) an activity such as a rapid response analysis. The plans that result from this could include further triggers for decision-making processes, for example, to agree how to adapt or scale up the response should particular risk outcomes materialize. Though less ambitious in the scale of early action guaranteed, these options are likely to be more palatable to donors and preserve the flexibility of programmes to respond and adapt as the situation evolves.

- clear statement and articulation of the types of risk the organization is prepared to undertake, and the types of return it expects to achieve in relevant policies, strategies and mission statements;
- a clear and consistent message from senior management;
- clear guidelines for how risk-based decisions should be initiated, justified and escalated;
- an open environment of regular discussion of risk between managers and staff;
- clear incentives for *appropriate* risk-taking, including the introduction of rewards and the removal of disincentives, for example through providing decision-makers with institutional 'cover'.[129]

Develop appropriate financing arrangements

Learning from private-sector risk management approaches, funding models and instruments can be developed to help pool, finance and transfer risks. In particular, flexible funding arrangements can help agencies manage risks more effectively. This is discussed in more detail in Chapter 6.

Develop risk management partnerships

Risks are often easier to bear collectively. This can be achieved to some extent through pooled funding arrangements, but partnership implies a deeper engagement in which donors, agencies and affected governments (and other stakeholders such as local NGOs, community groups, faith-based groups, local authorities, etc.) engage to manage risk collectively through shared risk assessments, and jointly owned strategies and contingency plans which identify risk factors and trigger events.

5.2.2 Better management of national government risks

Build political capacity of vulnerable populations

Governments are likely to be more responsive to the needs of vulnerable populations where those populations are able to articulate and assert their needs, and if government perceives there to be political risk in ignoring these needs. Initiatives to include vulnerable populations in decision-making and ensure their participation in political processes should be explored and accompanied with investments in

129 Ibid.

the education and development of vulnerable communities. Decentralized government structures may make it easier for communities to engage in relevant processes and more closely align political and humanitarian risks by bringing decision-makers and affected populations closer together.

Ensure appropriate political incentives for government

Governments must expect reward for responding to early warning and anticipate penalties for failing to do so. A free press can facilitate this by informing populations of the food security situation within their country and of government efforts to address it. Independent EWI, made freely accessible, can also help populations, the media and a political opposition hold governments to account.

Regular elections offer a means by which populations can reward or punish governments, though they do not guarantee early action, as demonstrated most recently in Kenya. Also important is a clear contract between the state and the people linking the legitimacy of government to the prevention of famine. This has value in both democratic and non-democratic contexts, as the examples of India and Ethiopia demonstrate.

Foster national discourses on food security

The political value of action to reduce humanitarian risks is likely to be higher where food security assumes a prominent role in national debates. There are important roles for national civil society, the media, the government and political opposition in fostering such a discourse; however, for it to have value it needs to be based upon a shared and realistic understanding of national food security and the risk of crisis: governments that make unrealistic promises about what they will achieve may find themselves reluctant to acknowledge failure, and therefore reluctant to acknowledge crises. Food security should be a bipartisan issue rather than a political point-scoring opportunity.

Invest for the long term

Governments often associate a high-profile humanitarian response with political cost. A politically more palatable model might see early interventions to protect livelihoods delivered through existing long-term development programmes. Sufficient early preventive interventions would reduce the need for emergency programmes and any associated political risks.

5.3 Risk and resilience

Returning to humanitarian risks, the idea of resilience has recently assumed prominence among development and humanitarian practitioners and thinkers. As a development concept, resilience has emerged from a variety of disciplines including ecosystem stability, engineering, psychology and the behavioural sciences, in response to increasing risks and uncertainty.[130] There is no one common definition of resilience;[131] however, most conceptions tend to emphasize the property of a process or system to anticipate, absorb, adapt and recover, or 'bounce back', from shocks or stresses.

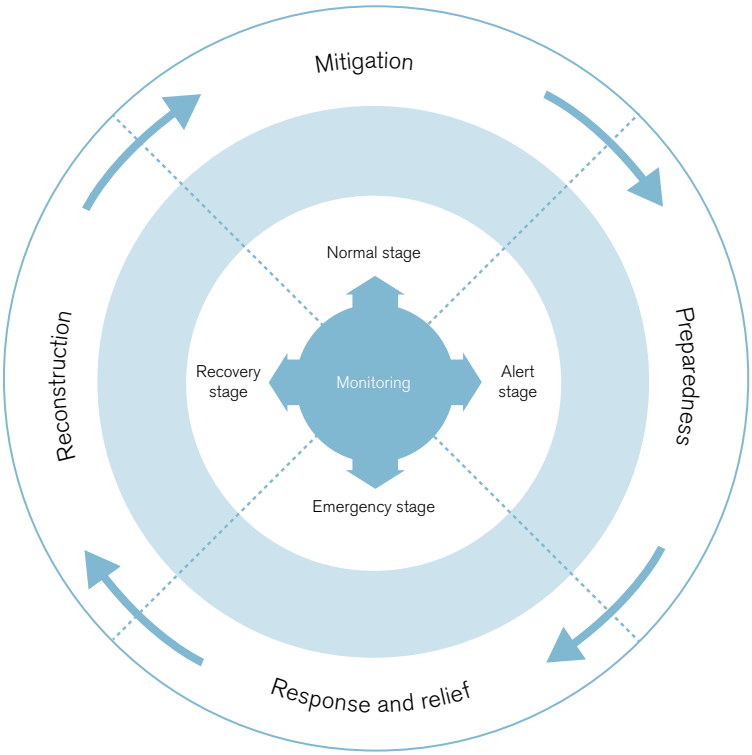
As such, resilience is highly relevant in contexts of recurrent food crises where long-term stresses and frequent droughts trap vulnerable populations in a cycle of compounding shocks and increasing vulnerability. In particular, resilience offers a framework extending that previously provided by drought cycle management (DCM). While DCM helpfully sets out the various phases of drought response, it does so in a somewhat static manner: drought management is presented as an endless cycle of mitigation, preparation, response and recovery, distinct from any process of development (see Figure 5.4).

Resilience situates DCM within the development process by linking it to the protection of development gains. Resilient development is a process unlikely to be set back by drought or other shocks and stresses (see Figure 5.5).

Although this distinction may seem superficial, it has an important implication: crisis management should be located within a broader development strategy. Humanitarian risks are risks to development – even if a food crisis does not cost lives, it will almost certainly wipe out development gains by eroding assets, weakening health and destroying livelihoods. It also worsens the outlook for development, as it leaves people more vulnerable to future shocks and stresses.

130 Mitchell and Harris (2012).
131 Foresight (2012).

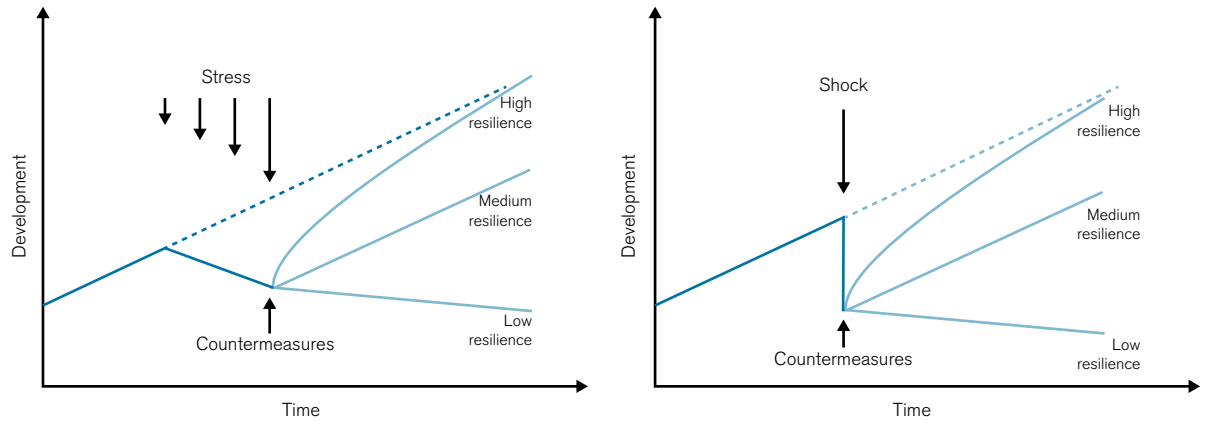
Figure 5.4: Drought cycle management



Source: Adapted from IIRR, Acacia Consultants and Cordaid (2004).

A strategy for resilient development must evaluate the risks to its objectives and incorporate strategies to manage them. By providing a means to anticipate and absorb shocks, early warning and early action are central to this. As discussed in Chapter 4, early action along the spectrum of livelihoods, preparedness and emergency interventions demands close integration of development and humanitarian programmes. Where agencies have development and humanitarian programmes, joint strategies should be developed with shared objectives and shared risk assessments. Where possible, humanitarian and development staff should be jointly accountable for achieving joint programme objectives and managing shared risks.

Figure 5.5: The development impact of a stress or shock depends on the system's resilience



Source: Adapted from Mitchell and Harris (2012), and Conway, Waage and Delaney (2010).

Specialist humanitarian and development agencies have to find ways of working together to deliver jointly owned, integrated programmes. Again, there are promising examples of agencies seeking to do so, such as the joint WFP, FAO and UNICEF Strategy for Enhancing Resilience in Somalia in which the three agencies have a common plan and results framework, although their programmes will remain separate. Because agencies are encouraged to compete with one another for donor funds and differentiate themselves, achieving effective partnership is difficult.[132] Donors could seek to incentivize cooperation, for example, by favouring joint proposals or joint programmes in their funding decisions.

5.3.1 Community resilience

Strategies for resilient development should seek to build resilience among vulnerable populations, so that households and communities themselves are better able to anticipate and recover from droughts. Béné et al. (2012) identify three complementary components to resilience programming: building absorptive capacity, adaptive capacity and transformative capacity (Figure 5.6).

Building absorptive capacity

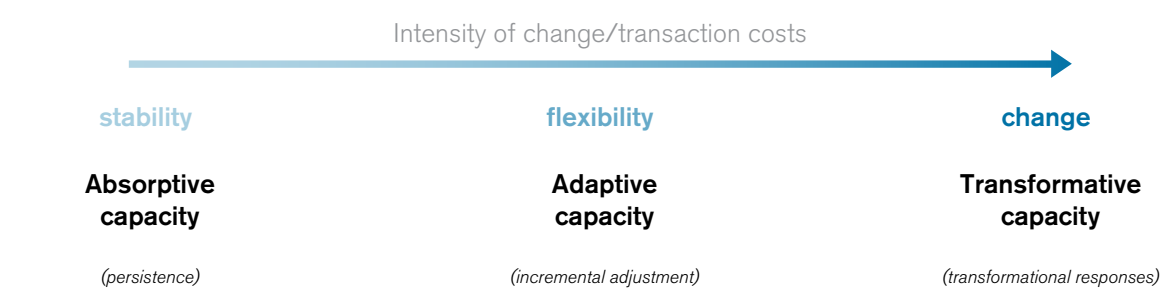
Communities and households need to be helped to reduce disaster risks and increase the ability to absorb shocks without suffering significant permanent impacts. Specific strategies might include:

- Community-based early warning and preparedness. This could include providing communities with access to weather forecasting information or data on forage or livestock health, for example, along with support to help identify response strategies and contingency plans.
- Strengthening and maintaining informal safety nets. Communities may develop their own means of sharing risk such as systems of cash or food transfers or rotating savings and credit schemes. These are effective at diversifying idiosyncratic risks, but when all households come under strain simultaneously, as is likely to be the case with a drought, these systems may break down. External financing and support can help maintain them through periods of collective stress.
- Supporting asset recovery. After a drought, households are likely to be asset poor, with crops having failed and livestock having died or been sold off. They can be helped to rebuild their assets by interventions such as revolving livestock schemes that help communities collectively manage and develop an initially small allocation of livestock.

Building adaptive capacity

The flexibility of communities needs to be enhanced to respond to shocks and adapt to shock trends or longer-term stresses such as environmental, social and institutional changes. Specific strategies might include:

Figure 5.6: Three components of resilience programming



Source: Adapted from Béné et al. (2012).

132 Foresight (2012).

- Diversifying livelihoods, to help households develop a spread of income streams and reduce their overall risk profile and exposure to drought.
- Increasing access to technologies, for example, providing farmers with ICT to help them access market and weather data so that they may make better-informed planting, harvesting, storage and selling decisions.
- Promoting asset accumulation and diversification, to help households build up a cushion of assets and reduce their overall risk profile and exposure to drought.
- Building human capital through, for example, improved access to health and education.

Building transformative capacity

This entails enhancing the institutions, governance frameworks and enabling conditions that determine the community's overall resilience potential and ability to realize this. Strategies will be long-term and supportive of institutional reform, new public policies, behaviour change, changes in attitudes and beliefs, etc. Alignment of political risks (for donor and national governments) with humanitarian risks would represent transformative capacity-building.

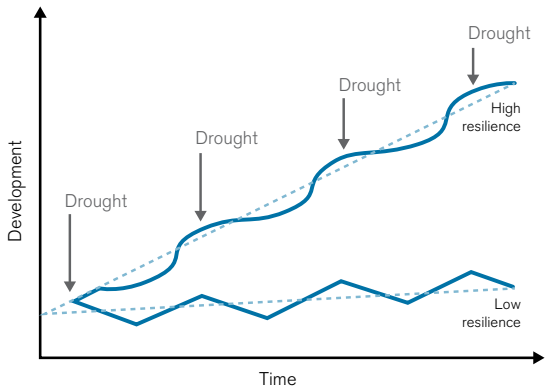
A two-pronged approach – to build resilience among vulnerable communities while also increasing the flexibility of programmes to anticipate drought and adapt and scale interventions accordingly – could help break the current cycle of compounding drought and deepening vulnerability, leading to more sustained development (see Figure 5.7).

The resilience agenda presents an important opportunity to shift development thinking towards a new paradigm more appropriate to a future of increasing uncertainty and risk. It provides a helpful organizing concept that transcends the traditional silos of development and humanitarian work. And it implies a more dynamic way of managing risk than the common 'tickbox' approach in which risks are assessed as part of a binary project approval process and then forgotten. Instead, the anticipatory and adaptive nature of resilience implies a continual process of risk monitoring and management to which EWS are ideally suited. Finally, the concept of resilience has an intuitive appeal and powerful resonance with practitioners, senior managers and politicians, helping create the political and institutional space for meaningful reform.

On the other hand, the notion of resilience remains somewhat vague, with different organizations often using their own definitions. This raises questions of how resilience can be measured and assessed in a consistent way, creating potential challenges in particular for agencies and donors designing projects to 'build resilience' and needing to agree measurable outcome indicators.

There is also a risk of resilience becoming something of a fad, and there are genuine concerns among many development and humanitarian practitioners that much of what is currently being labelled as resilience is in fact little more than the relabelling of familiar initiatives: one interviewee wryly observed that one of the best ways to ensure funding is to include 'resilience' in the proposal title. Ensuring that resilience does not become a passing fad requires action from senior managers and politicians to undertake the institutional and organizational reforms needed to incentivize appropriate risk-taking and increase flexibility and adaptability.

Figure 5.7: The impact of different levels of resilience in the context of recurrent crises



Source: Chatham House.

5.3.2 Towards a high-reliability system

High reliability organizations (HROs) provide important lessons for attempts to build a more flexible and adaptable system, better at preventing crises and protecting development gains. HROs were originally identified as organizations that achieve near error-free performance while operating in high-risk situations where failure may have catastrophic consequences.[133] Typical examples discussed in the literature include nuclear aircraft carriers, air traffic control systems and power generation and distribution companies. More recent research has identified a number of characteristics of HROs, which are argued to possess the unique quality of organizational 'mindfulness'.[134] These are considered below.

Preoccupation with failure

HROs are highly responsive to early warning signals, through formal and informal channels. They also tend to take action particularly early on, rather than waiting for certainty. As Weick and Sutcliffe (2001) observe:

> The key difference between HROs and other organizations managing the unexpected often occurs at the earliest stages, when the unexpected may give off only weak signals of trouble. The overwhelming tendency is to respond to weak signals with a weak response. [HROs possess] the capability to see the significant meaning of weak signals and to give strong responses to weak signals.

HROs follow up early warnings to further assess risk, and engender cultures in which staff are actively encouraged to report risks, errors or concerns. Contrast this to the inertia of agencies in Somalia during the first half of 2011, where formal early warnings were not followed up, informal early warnings were discounted, and ultimately insufficient concerns were relayed from national staff to corporate headquarters.[135]

Reluctance to simplify

HROs are likely to run some level of operational redundancy or slack. This entails a higher cost base but manages risk. Redundancy is likely to be targeted at the gathering of early warning data and its analysis and ensuring that crucial early warnings are not missed. Redundancy can also provide time and capacity for learning.[136] Again, this appears distinctly different from the *modus operandi* of most humanitarian agencies, which struggle to build redundancy into their operations because donors are unwilling to fund it. It is notoriously difficult to fundraise for redundancy in the form of pre-positioned aid and medicines. Agencies find it difficult to maintain even a small degree of operational slack in vulnerable countries owing to the difficulties in funding long-term staff contracts. This contributes to the binary 'on/off' approach to humanitarian response, where staff are parachuted in once a crisis hits and then leave just as quickly afterwards. It hampers the accumulation of contextual knowledge and can lead to perverse incentives in some cases: the funding arrangements for WFP country offices are specifically designed to minimize redundancy but have the unintended consequence of encouraging WFP staff to promote in-kind food aid over alternatives, potentially resulting in suboptimal responses and turf wars with other agencies (see Box 4.2).

Sensitivity to operations

HRO frontline staff have very high awareness of risk (based on the preoccupation with failure) and its implications for the organization's overall operations. Hopkins (2007) contrasts this with organizations constrained by 'silo thinking' where 'employees operate within their own small sphere of influence without thought of the more remote impact of their activities', observing that a culture of silos has been implicated in many organizational failures.[137]

As already noted, the humanitarian and development divide is a classic example of siloed operations. It is a commonly identified problem that development actors fail to respond and adapt to early warning signals, considering this something for humanitarians to worry about, while humanitarian actors often fail to take into account

133 See, for example, Hopkins (2007).
134 Weick and Sutcliffe (2001).
135 Darcy et al. (2012a); Bailey (2012).
136 Lawson (2001).
137 Hopkins (2007).

the broader livelihood implications of their emergency interventions. In a given country, individual agencies may operate in separate silos, developing their plans in isolation from one another, with cooperation often going no further than basic information-sharing.[138]

Commitment to resilience

HROs are able not only to anticipate problems but also to adapt rapidly to deal with changes in their situations. Seemingly all agencies and donors now profess a commitment to resilience in some form or another, but all still have a long way to go to become more flexible and adaptive.

Deference to expertise

Managers in HROs will defer to more junior staff with greater expertise or knowledge of the situation. Again, this is something the humanitarian system struggles to do, as corporate decisions to respond to early warnings do not rest with national staff, and are typically taken remotely at headquarters level. Often clear processes or channels for triggering such a decision may be missing, meaning that national staff struggle to mobilize their organizations.[139] In donor bureaucracies, political risks associated with 'wasting taxpayers' money' mean that funding decisions can be extremely centralized: the UK Department for International Development's response to the 2011 Horn of Africa crisis had to accommodate the Secretary of State's insistence on signing off all humanitarian expenditures.[140]

The brief discussion above indicates there is a significant gap between the characteristics of the humanitarian system and those of an HRO, and closing this gap requires donors and agencies to undertake a series of reforms to engender a culture of appropriate risk management, overcome silos, decentralize decision-making, incorporate redundancy and increase the capacity of the system to adapt and respond to a changing risk environment.

HROs have been able to develop these qualities precisely because the risk of operational failure has serious consequences for the organization and its staff. In some cases, operational failure represents an existential threat for the HRO. As such, HROs are almost perfectly accountable for preventing disaster. As shown above, this is not the case for the humanitarian system where accountability is shaped primarily by the political risk preferences of donors and national governments. Better alignment of political and humanitarian risk is a basic condition for significant, sustainable reforms.

138 Bailey (2012).
139 Ibid.
140 ICAI (2012).

6. Financing Early Action

Key messages

- The aid architecture is not fit for the purpose of funding early action. Donor risk preferences mean humanitarian aid is reactive rather than anticipatory, while development aid is slow and inflexible. Early action is often lost between the two.
- Non-DAC donors are increasingly important players and present new challenges and new opportunities for financing of early action.
- Pooled funds offer significant potential for funding early action; however, this potential is not being realized.
- Private humanitarian funding tends to react to high-profile disasters, so is difficult to harness for early action. This presents particular challenges for NGOs, which are heavily dependent on this source of donations.
- Innovative risk-financing approaches offer significant potential to fund early action in isolation from political agendas. However, realizing the full potential of these approaches requires donors to adopt new approaches and business models.

The international aid architecture is to a large extent shaped by the permanent tension between donors' political risks and humanitarian risks. Political risk considerations emphasize centralization of decision-making, oversight, a preference for 'tried and tested' interventions and reluctance to experiment or innovate, and rigid funding lines that cannot be easily or quickly revised. On the other hand, humanitarian risk considerations tend towards decentralization, a willingness to innovate, and flexible, rapid funding that can allow programmes to scale and adapt.

This chapter considers how these tensions play out within the existing aid architecture shaped primarily by the OECD-DAC (Development Assistance Committee), before considering the potential of new actors, private funders and new risk-based financing approaches to help manage humanitarian risks more effectively.

6.1 OECD-DAC donors

Between them, DAC donors comprise the majority of humanitarian and development aid, and as such they are the primary architects of the aid infrastructure (Figure 6.1). Their risk preferences drive the rules and norms for funding and the design of specific instruments. An overview of the top 10 humanitarian donors' early funding performance is provided in Appendix E. Below we explore some of the principal constraints on effective early funding.

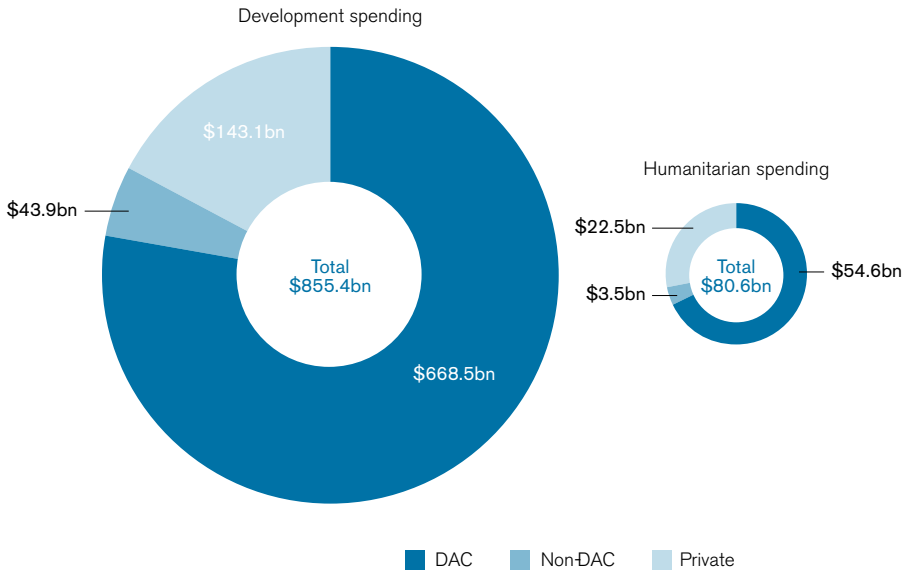
Segregation of humanitarian and development funding

Comprehensive early action requires a range of development and humanitarian interventions that can be integrated and phased. However, humanitarian and development funding lines are not always organized to achieve this. The EU has two separate legal instruments for humanitarian and development funding, enshrining segregation in law and resulting in a significant funding gap for early action.[141] In a small number of donors,[142]

141 Morazán et al. (2012).

142 For example, France and Germany.

Figure 6.1: Development and humanitarian spending by donor category, 2006–11



Sources: Development Initiatives (2012a); OCHA Financial Tracking Service (FTS), available at http://fts.unocha.org; OECD-DAC Aid Statistics Database, available at http://www.oecd.org/dac/stats/.

Notes: Humanitarian private-donor contributions calculated using data from Development Initiatives (2012a). Development spending figures calculated from the OECD-DAC database using an analysis of total Official Development Assistance from DAC and non-DAC donors minus reported humanitarian spending. Private contributions for development spending estimated using OECD-DAC data on private grants from companies and individuals in DAC and non-DAC countries. Note that non-DAC spending should be used as an indicative figure only owing to differences in reporting standards and gaps in data. Constant 2010 prices used for comparison.

humanitarian and development aid may fall under the authority of separate ministries, but more commonly they are managed within separate departments with limited interaction. This is a recognized problem among many donors, and a significant number are taking steps to improve coordination between the two functions (see Section 6.1.1).

Two somewhat opposing sets of principles for humanitarian and development aid mean this bifurcation is institutionalized within the donor system (see Box 6.1). The contradiction of humanitarian and development principles makes the management of famine risk harder but helps manage political risk. For example, because humanitarian aid provides a means to bypass government, it is used by donors in countries where bilateral donorship may present political risks (if, for example, the government is corrupt or geopolitically opposed to the donor) even if the situation is not an emergency.

Inflexibility

Donor efforts to minimize political risk in development funding tend to manifest as rigid funding lines and cumbersome approval procedures, allowing donors to maximize oversight and control. Development plans may take up to 18 months to develop, approve and commence. More importantly, plans rarely contain mechanisms by which they can be revised in response to early warnings or other risk factors.

A certain amount of inflexibility is also imposed on DAC donors by the international principles to which they subscribe. The Paris Declaration on Aid Effectiveness means donors can only provide funding from development

lines in countries which are named development partners, and only then in sectors which are identified thematic priorities (see Box 6.1).

The inflexibility of development funding often transfers the responsibility for early response to humanitarian actors. Although these do not necessarily possess the full range of capacities needed for the earliest livelihood-based interventions, in most respects they can at least access more flexible funding. In particular, aid is more rapidly disbursed, planning and approval processes are faster and decisions are unconstrained by development principles. Importantly, donors tend to be more willing to accept political risks with humanitarian aid.[143]

However, other rigidities remain. In a few cases they are stark, such as Japan's requirement that a national emergency is first declared by government before humanitarian funds can be made available, making early action almost impossible. Belgium and Germany both have conditions on their humanitarian aid that prohibit its use for (preparedness-related) capacity-building, although each is working to remove these constraints.

Box 6.1: The clash of civilizations – development and humanitarian principles

Efforts to achieve closer integration of development and humanitarian work are constrained by the principles that govern each. These are often hard to reconcile and at times completely contradictory. At the most fundamental level, the Good Humanitarian Donorship principles of neutrality, independence and impartiality are at odds with the Paris Declaration's emphasis on (national) government ownership and development partnership. Where development aid seeks to engage and partner with national governments, humanitarian aid seeks to bypass them.

There are good reasons why this is so. In situations of war and fragility, humanitarians must preserve their neutrality in order to maintain humanitarian access, protect their staff, ensure that assistance is provided to *all* those in need rather than those on a particular side, and minimize the risks of being drawn into conflict. In contrast, national development is a political process heavily dependent upon government ownership and state action; bypassing the state risks undermining development in the longer term.

But where the lines between humanitarian and development work blur, as they do with famine early action, the opposing principles become problematic. For example, interviews conducted for this research indicate that some humanitarian donors refuse to fund the PSNP, a crucial platform for early action in Ethiopia (see Condition 5, Chapter 3) because it is government-administered and so would contradict Good Humanitarian Donorship.

More generally there is a tendency for donors to resort to humanitarian aid (and bypass government) in countries where, in the words of one aid specialist, 'they don't trust the government', regardless of whether or not there is an emergency. In circumstances such as these, humanitarian aid (and humanitarian principles) are used by donors to manage domestic political risk rather than humanitarian risks.

The Paris Declaration also emphasizes the division of labour between donors, which are encouraged to specialize and harmonize their efforts, and provide long-term, predictable assistance to their developing-country partners. This limits the potential for donors to fund early action from their development lines: they can only do so in countries where they are a partner of the national government, and then only if the intervention fits within their thematic priorities. While this is unlikely to be an issue in a country such as Ethiopia, which has 16 development partners from the DAC, it represents a significant constraint on development-aid-funded early action in Chad, which has two partners: the EU and France.

143 OECD (2012a).

Tied aid imposes significant rigidities. For example, a significant share of US emergency food aid is provided in kind and shipped directly. This allows the US government to effect transfers to its farm, agribusiness and shipping lobbies, but limits the capacity of agencies to respond in an appropriate or timely manner.

Limited spending time frames also reduce the flexibility of humanitarian funding. Such short time frames seriously constrain the ability of humanitarian actors to take action over the life of a slow-onset food crisis: from initial early warnings through to the emergency phase and recovery. Early action too often falls between the cracks of time-bound humanitarian funding on the one hand and unresponsive development funding on the other. Promisingly, a number of donors including Denmark, the Netherlands, Spain and Sweden offer multi-year humanitarian funding commitments, and others such as the UK are looking to follow suit.

Budgetary considerations

Many donors hold a certain percentage of their humanitarian budgets in reserve each year to fund new or escalating emergencies. However, this means that the point at which early warning occurs within the financial year can have implications for the scale of early financing provided. By year-end, donors may have spent much of their reserves and so be more reluctant to provide early funding to mitigate an emergency expected to materialize in the following year.[144] Requests for early funding at the beginning of the year may also be unsuccessful because of concerns about exhausting the reserve too early on.

Reporting and accountability

Donors rightly seek to minimize political risks by demonstrating results and avoiding misappropriation of aid. However, their attempts to do so are often at odds with management of humanitarian risks. As noted, during 2010 and 2011, donor concerns that aid might be captured by al Shabaab in Somalia resulted in onerous reporting requirements for agencies and increased operating costs, administrative burdens and lead times, slowing the overall response.[145]

More generally, donor concerns about corruption can constrain the scope of early action. A growing evidence base points towards the value of cash programming as a means to help vulnerable populations avoid destructive coping strategies, build assets and access food where markets are functioning. As such, cash is an increasingly important part of the early action, response and recovery toolkits. However, the greater scope for corruption relative to in-kind food aid means donors demand a significantly greater degree of reporting and oversight, reducing the overall appetite for cash programming among donors and agencies.

Donor attempts to minimize the political risks associated with corruption can result in perverse incentives for agencies. When one NGO delivering cash programmes through local partners in Somalia reported a loss to its donors in 2011, it was told by one that it had to return the money. The donor transferred its political risks to the NGO as an operating risk, but in doing so punished the NGO's commitment to transparency.

6.1.1 Examples of innovation

OECD-DAC donors are increasingly aware of the problems discussed above, and are beginning to experiment in order to find solutions. Some promising examples are considered below.

EU: SHARE and AGIR Sahel

The EU *Supporting the Horn of Africa Resilience* (SHARE) initiative aims to build the resilience of vulnerable populations to drought through joint planning between humanitarian and development staff and the use of development cooperation and humanitarian funding instruments. The multi-sector programme includes

144 This dynamic may be offset to an extent by the policy of some donors to pass unspent development funding to their humanitarian budgets at year end, where it can be swiftly spent to ensure donors meet their disbursement rates for OECD-DAC reporting. Typically, this might go to pooled funds; however, where there is a credible opportunity to allocate the funds to a gathering food crisis, then this may also be possible.

145 Bailey (2012).

support for life-saving activities, recovery and investment in longer-term development such as livestock health and natural resource management.

The EU was also instrumental in launching the *AGIR Sahel* initiative in the wake of the 2012 food crisis. This is a joint initiative with regional governments in West Africa, other donors and international organizations to link humanitarian, development and public–private partnerships to deliver integrated programmes targeting vulnerable groups.[146] The initiative will spend €750 million to implement a three-year programme of projects including the provision of seasonal safety nets, investment in health care, empowerment of women and investment in food markets.[147]

United States: resilience and crisis modifiers

USAID is similarly attempting to integrate development and humanitarian functions. It has established joint planning cells in its offices in the Horn and Sahel, bringing together humanitarian and development staff to engage in joint problem analysis and objective-setting, coordinated strategic planning and the conduct of 'mutually reinforcing project design and procedures'. The use of both development and humanitarian funding lines will be utilized to meet these shared objectives.

USAID has also pioneered the use of crisis modifiers, which provide a channel through which implementing agencies can agree revisions to livelihood programmes in response to drought or other events, avoiding the need for new plans and funding requests to be submitted and agreed. While promising, crisis modifiers only provide limited flexibility and their overall use remains marginal, representing $2.1 million of the overall US response to the 2011 Horn of Africa drought, or 0.32 per cent of the total US response.[148]

Spain: multi-year funding and co-financing

Despite some significant limitations in its ability to offer timely, flexible funding (Appendix E), Spain does provide some genuine examples of innovation. The government offers multi-year humanitarian funding to NGOs working in protracted crises and also uses unearmarked multi-annual funding for international organizations and bilateral partners, allowing predictable financing but also the flexibility to shift resources in times of crisis; Australia, Denmark, Spain and Sweden are all moving towards these forms of multi-annual partnership agreement. Funding strategies emphasize the early deployment of development funding rather than stretching humanitarian budgets. To address segregation, Spain has made all development desk officers responsible for linking to humanitarian programmes, as opposed to the conventional donor model in which forging links is left to the humanitarians, and is promoting 50 per cent co-financing of recovery-focused projects – an approach which could easily be extended to more general resilience programming and early action.[149]

Rapid response funding

A number of DAC donors are innovating with new mechanisms to provide agencies with fast access to funding, allowing them to respond quickly to rapid-onset crises but potentially also to take early action to avert slow-onset crises. DAC peer reviews indicate that Australia, Canada, New Zealand, Spain and Switzerland all currently pre-position emergency funds with national Red Cross societies, underwriting initial response actions and reducing the time agencies need to spend mobilizing funds. Spain, Sweden, the UK and Switzerland extend this model to NGO partners. The Swedish Rapid Response Mechanism provides a pre-arranged draw-down facility to a set of NGOs selected according to a number of criteria.[150]

146 European Commission (2012b).
147 OECD (2012b).
148 Total humanitarian contributions from the United States to Ethiopia, Kenya, Somalia, Djibouti and the Horn of Africa appeal totalled $656,091,899 in 2011, see OCHA Financial Tracking Service (2013a).
149 OECD-DAC (Development Assistance Committee) (2011).
150 OECD (2009).

Box 6.2: The CBHA Emergency Response Fund

The Consortium of British Humanitarian Agencies (CBHA) was established in 2010 by 15 UK-based NGOs. A key element of the initiative was the creation of a £4 million Emergency Response Fund (ERF), capitalized by the UK government and managed collectively by the NGOs. The ERF's objectives were to improve NGO access to early funding, depoliticize funding by devolving decision-making away from government and improve cooperation between NGOs. It was a success on all fronts. Evaluations of the CBHA ERF found that:

- It was the fastest source of external financing available to member NGOs, typically two to three times faster than the next best source in rapid-onset emergencies and *over 20 times faster in slow-onset emergencies*.
- Funding decisions were 'independent of the political considerations affecting donor funding'.
- It improved coordination and collaboration between the member agencies.
- It increased cost efficiency and reduced transaction costs involved in funding and allocation decision-making.

The success of the CBHA ERF in responding early to slow-onset crises is particularly notable. It made its first allocations to the 2011 Horn of Africa crisis in February 2011 and a second round in April. In contrast, UK NGOs were unable to launch a coordinated public appeal via the Disasters Emergency Committee (DEC) until 8 July, when sufficient media support became possible.

The success of the CBHA ERF was recognized in the UK government's own Humanitarian Emergency Response Review (HERR), which recommended that it be continued and expanded. However, this recommendation was not followed and UK government support for the CBHA ERF was withdrawn in what was widely viewed as a political decision taken on the basis of political risk: despite the CBHA ERF's demonstrable success in reducing humanitarian risk, politicians were unwilling to tolerate a perceived increase in political risk associated with devolved funding.

Instead, the UK has introduced the RRF, a funding window that opens to pre-qualified NGOs in the first 72 hours of an emergency. However, the mechanism appears primarily intended for high-profile, rapid-onset disasters while the benefits in terms of improved inter-agency cooperation are lost. Most tellingly, final decisions remain highly centralized, resting with the Secretary of State. This indicates that political risks will continue to dominate decision-making and constrain early action for initially low-profile, slow-onset crises.

Source: Cosgrave et al. (2012).

The UK's recently introduced Rapid Response Facility (RRF) offers early funding to qualified NGOs, made available in the first 72 hours after a rapid-onset disaster or spike in a chronic humanitarian emergency. The RRF effectively replaces the Consortium of British Humanitarian Agencies (CBHA) Emergency Response Fund – a promising pilot initiative terminated by the UK government, which was ultimately unwilling to devolve funding decisions to national NGOs (see Box 6.2).

WFP's Forward Purchase Facility

Donors are increasingly providing support for WFP's innovative Forward Purchase Facility (FPF), which essentially allows WFP to self-underwrite in order to secure food stocks and establish supply lines in anticipation of demand. For example, the FPF was able to establish a supply line to the Sahel in December 2011 well in advance of the crisis peak in 2012. Initial evaluations indicate that country offices on average have gained 56 days of supply

lead time as a result of the initiative. The FPF is now expanding its forward purchasing to include a wider range of food types and greater geographic coverage including local purchasing.[151]

While there is much that donors can do to increase flexibility, hasten access and achieve closer integration between development and humanitarian lines, it is rarely the case that donor funding rules explicitly preclude early action. And there are many examples of donors developing facilities and initiatives to address these constraints. Large numbers of donors now earmark funds for risk reduction, and have developed rapid response mechanisms and contingency funds. Many are also experimenting with organizational and institutional changes to increase coordination between their humanitarian and development staff.[152] Nevertheless, there is a strong perception among agencies that early funding is difficult to access, and donors should seek to clarify guidance to help agencies identify through which channels early funding can be made available and under what circumstances. In particular, donors should identify funding criteria to identify when particular types of early action are warranted.

Conversely, agencies must more effectively make the case for early funding: a common observation among donors is that agencies often struggle to articulate precisely what early action consists of beyond basic preparedness and 'doing an emergency response earlier'. There are promising signs that this is beginning to happen. The 2013 Somalia CAP document includes a significant resilience component, noting that 'the greatest increase in CAP funding comes from the emphasis on resilience programming in a humanitarian context, which has higher upfront costs than basic life-saving interventions'. Importantly, the Somalia CAP has moved to a three-year planning horizon, the first example of this happening.[153] This is illustrative of a broad trend across all 2013 CAPs to incorporate resilience.[154] The question now is whether these activities will be funded: when preparedness lines were first included in the CAPs, the response from donors was weak.[155]

6.2 Non-DAC donors

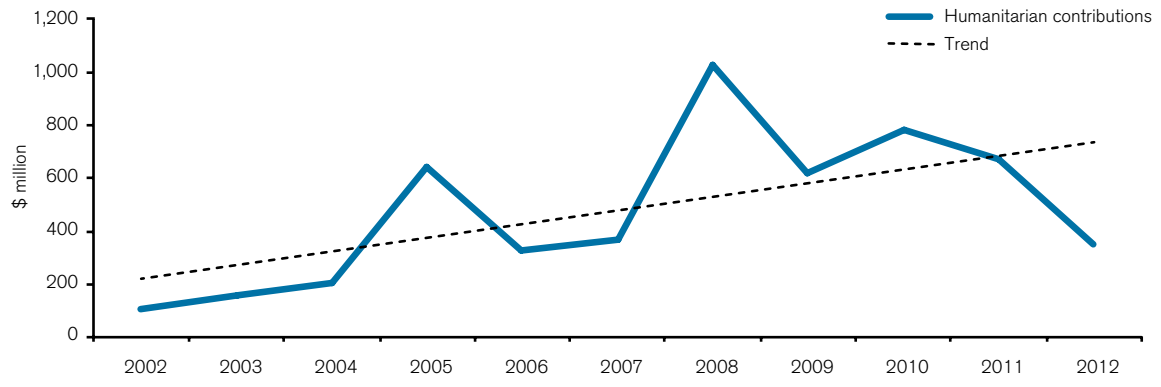
Often referred to as 'new', 'emerging' or 'non-traditional' donors, non-DAC donors are increasingly important funders of humanitarian response. According to data from the OCHA Financial Tracking Service, overall humanitarian contributions from non-DAC donors have increased (albeit with fluctuations) from $105.8 million in 2002 to $336 million in 2012[156] (Figure 6.2). Similarly, total ODA from these sources more than doubled from 2005 to 2011 in real terms, from $4.2 billion to $9.1 billion.[157] Both Saudi Arabia and the United Arab Emirates are now among the top 20 largest humanitarian donors, with a number of other donors such as Turkey, Kuwait, Brazil, China and India also making significant humanitarian donations[158] (Figure 6.3).

While such efforts are notable, they remain relatively small compared with overall DAC donations (Figure 6.4). And as with DAC-donors, non-DAC donors appear most responsive to high-profile, rapid-onset disasters and geopolitical considerations. For example, Saudi Arabia contributed over $645 million to Palestine in 2001, and along with the UAE made significant contributions to the Pakistan flood appeal and regional appeals in Yemen and Libya[159] (see Figure 6.5).

However, non-DAC donors differ from their DAC counterparts in a number of other respects. In general, non-DAC donors place less emphasis on the political risks associated with corruption and value for money,

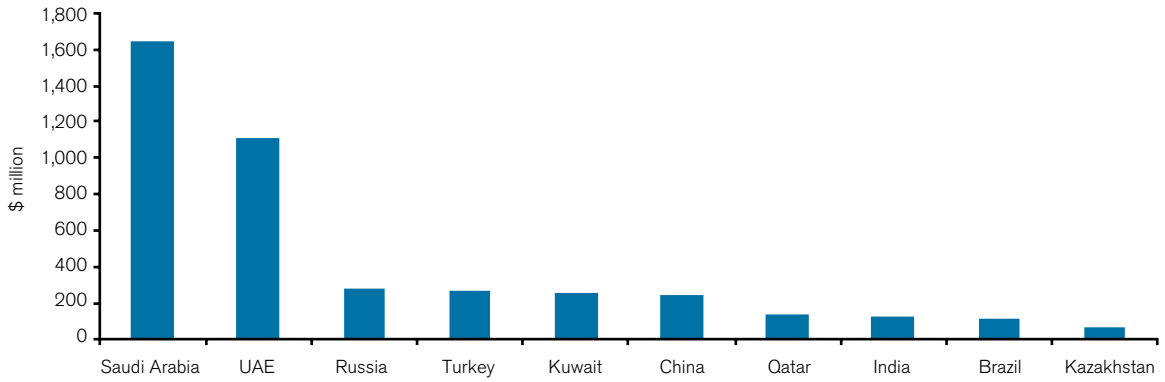
151 WFP (2012b).
152 OECD (2012a).
153 OCHA (2012b).
154 OCHA (2012c).
155 Kellett and Sweeney (2011).
156 Analysis from OCHA Financial Tracking Service. Note that figures for non-DAC humanitarian donations are indicative only. Much of what is reported is done so voluntarily, and according to different accounting and reporting standards. Much of what is provided may not actually be reported.
157 OECD DAC Database, constant 2010 prices used for comparison, http://stats.oecd.org/Index.aspx?datasetcode=TABLE1#.
158 Development Initiatives (2012a).
159 OCHA Financial Tracking Service [online]. Available at http://fts.unocha.org/ [accessed November 2012].

Figure 6.2: Non-DAC humanitarian contributions, 2002–12



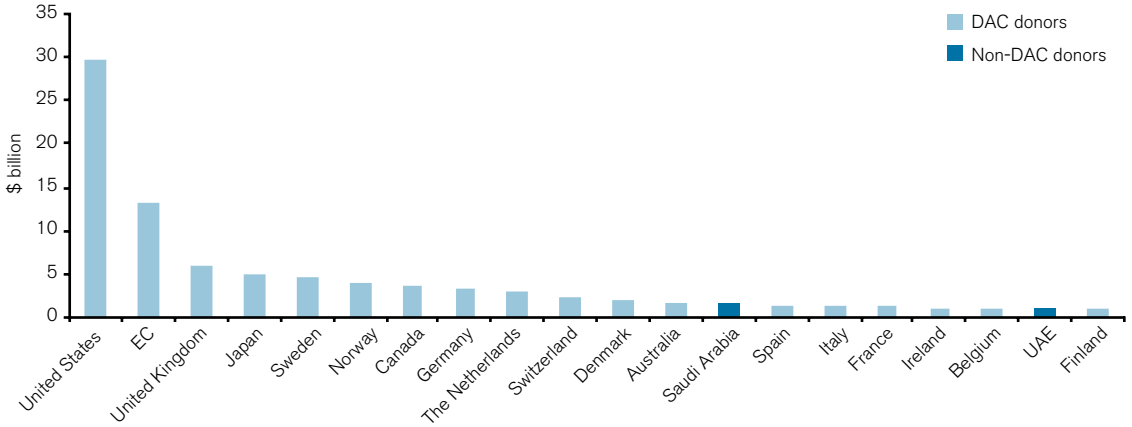
Source: OCHA Financial Tracking Service (FTS) Database. Note that some caution should be used when analysing non-DAC financial contributions owing to gaps in data and differing reporting standards and procedures.

Figure 6.3: Top 10 non-DAC humanitarian donors, 2002–12



Source: OCHA Financial Tracking Service (FTS) Database. Note that these figures should be treated with caution owing to differences in accounting methodology and reporting standards.

Figure 6.4: Top 20 humanitarian donors, DAC and non-DAC, 2002–12



Source: OCHA Financial Tracking Service (FTS) Database.

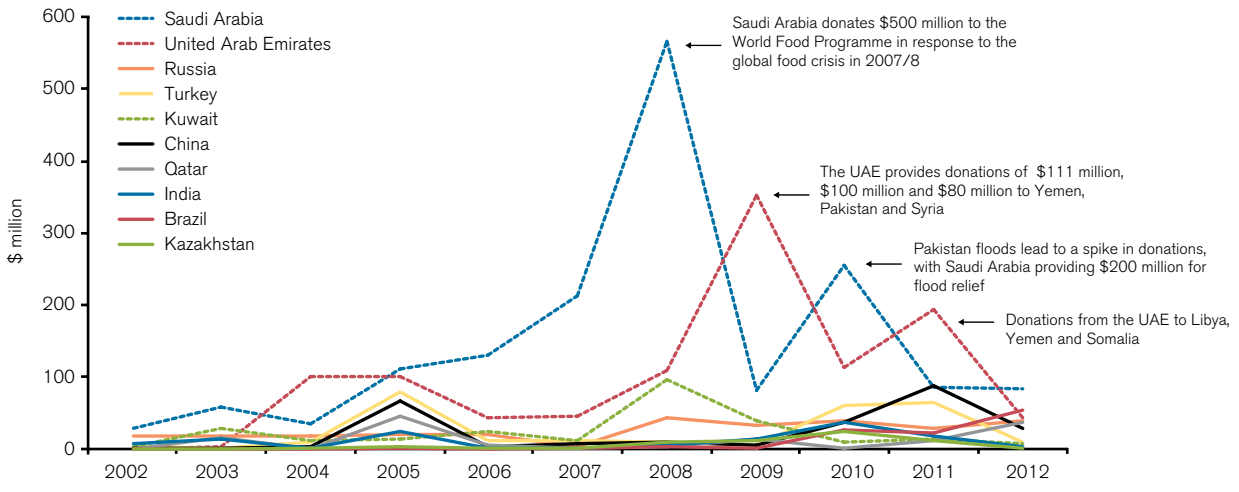
and provide a higher proportion of emergency assistance bilaterally, government to government: 37 per cent between 2006 and 2010 compared with 13 per cent for DAC donors.[160] This helps facilitate direct interaction with counterparts in affected foreign ministries, informed by principles of state sovereignty and South–South cooperation (the Brazilian government uses the term 'humanitarian cooperation' rather than 'humanitarian assistance', for example).[161] During the 2011 crisis in the Horn, China used bilateral channels 'where governments had infrastructure in place to deal with drought', providing cash and food worth approximately $64.5 million to the governments of Ethiopia, Kenya and Djibouti. Pragmatically, however, China also donated $16 million to WFP in order to provide assistance where government infrastructure was deficient, as was the case in Somalia.[162]

The preference for bilateral channels reflects not only a greater tolerance of corruption-related risks and greater emphasis on state sovereignty, but also a fuzzier distinction between humanitarian and development assistance. Non-DAC donors are not bound by the Paris Declaration and tend not to subscribe to the GHD Principles,[163] meaning that they are unconstrained by the clash of principles outlined in Box 6.1.

DAC and non-DAC donors may often have different geographic preferences. For example, only two African countries, Sudan and Angola, appear in the top three recipients of non-DAC humanitarian contributions from 2005 to 2010, with greater levels of support being provided to Asia and the Middle East, including countries such as Pakistan and Palestine with close cultural ties to large Gulf donors. This pattern is distinct to the geographic preferences of Western donors, for which African countries regularly appear in the top three recipients of DAC funding.[164]

Multilateral funding has increased from non-DAC donors in recent years, although it often remains tied to specific emergencies rather than core institutional funding. Promisingly, non-DAC donors are increasingly contributing to pooled funds such as the CERF.[165]

Figure 6.5: Non-DAC donor support to humanitarian emergencies, 2002–12



Source: OCHA Financial Tracking Service (FTS).

160 Development Initiatives (2012a).
161 Binder and Meier (2011).
162 Clark (2011).
163 Note that this is a generalization, and some non-DAC donors subscribe to the Good Humanitarian Donorship Principles. Typically, these are smaller European economies, but GHD members also include Brazil and Mexico.
164 Smith (2011).
165 Development Initiatives (2012a).

Box 6.3: Turkey in Somalia

For many, Turkey's engagement in Somalia offers a 'new model' of humanitarian funding. In August 2011, Turkish Prime Minister Recep Erdogan opened a new era of development cooperation between Turkey and Somalia, sending humanitarian workers into Mogadishu, opening an embassy in the capital and initiating a new flight route from Istanbul to the country. The presence of donor staff (and in many cases their families) in the capital was in stark contrast to the approach of DAC donors, which typically located their staff in Nairobi.

From 2011 to 2012, Turkey provided over US$350 million in humanitarian assistance in Somalia, drilling boreholes, building refugee camps and providing feeding centres. The work of the Turkish humanitarian agencies within Mogadishu and in implementing projects directly on the ground with local partners has been praised in many quarters for its speed and effectiveness. Turkey's willingness to operate outside the UN-led system in Somalia enabled it to fund operations in areas controlled by al Shabaab during the famine, after agencies tied to Western donors and the UN cluster system had been banned.

Sources: International Crisis Group (2012); Reuters (2012).

The increasing role of non-DAC donors therefore presents both opportunities and challenges for the humanitarian system. In a number of respects, non-DAC donors are better positioned to fund early action. Risk aversion is often less pronounced, making early action potentially more feasible. And the segregation of humanitarian and development funding is typically far less pronounced, reducing the risk that early action could be lost between the two. However, as with DAC donors, it seems geopolitical considerations are likely to be a significant factor in funding decisions, while lower levels of transparency and a general absence of aid strategies mean that it is harder to assess performance and accountability.

As non-DAC donors continue to assume a larger role in humanitarian funding, develop aid strategies, refine and rationalize their aid institutions and consider how to engage with international aid structures and norms, they have the chance to learn from the experience of others. In particular, they have the opportunity to avoid institutionalizing constraints on early action in the way that DAC donors have done. Likewise, there may be important lessons that DAC donors can learn from their non-DAC counterparts (see Box 6.3).

6.3 Pooled funds

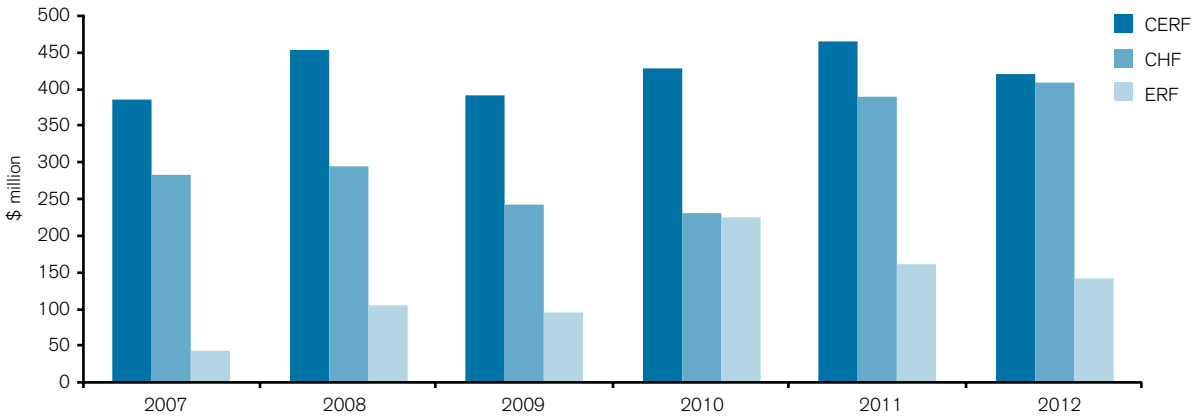
Pooled funds are an important component of the aid architecture (Figure 6.6), accounting for 8.1 per cent of donor humanitarian assistance in 2011.[166] An overview of relevant pooled funds is provided in Appendix F. They provide donors with the opportunity to pool risks, combine resources and reduce overall costs. And because allocation decisions are taken by agencies collectively rather than donors, pooled funds can reduce the tendency for agencies to anticipate donor funding preferences and compete for profile and differentiation, something that can result in delay.[167] That said, pooled funds by no means diffuse inter-agency competition completely, and NGOs in particular often complain about the challenges they face in accessing funds managed by UN agencies. Nevertheless, the devolution of decision-making to agencies helps insulate allocations from political considerations and align funding with humanitarian needs. In essence, pooled funds prioritize humanitarian risk over political risk.

Pooled funds cannot be completely insulated from political considerations, however. Fundamentally, their subordination of political risks to humanitarian risks creates tensions for donors, particularly those with pronounced geopolitical

166 Based on an analysis of OCHA Financial Tracking Service figures, which indicate that DAC and non-DAC spending through the CERF, CHFs and ERFs amounted to $898 million in 2011 (total minus carry-overs and private-sector donations), with total DAC and non-DAC humanitarian spending for 2011 totalling $11.04 billion.

167 Bailey (2012).

Figure 6.6: Donor spending through pooled funds, 2007–12



Source: UN OCHA Financial Tracking Service data, cited in Development Initiatives (2012a).

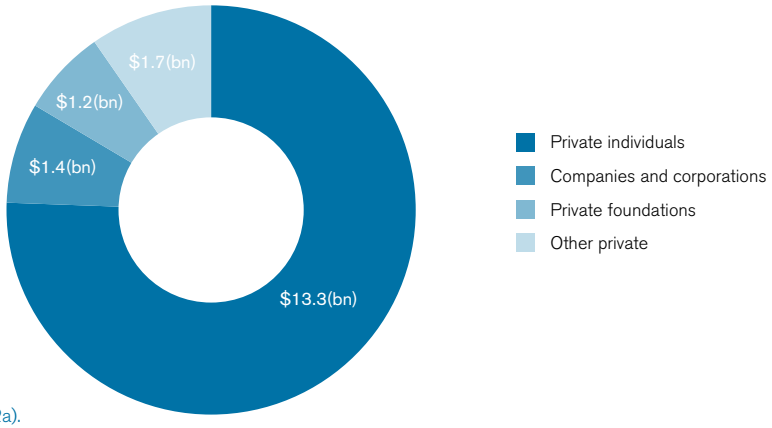
agendas or significant risk aversion. Ultimately, pooled funds rely on donors for the necessary upfront contributions, so are exposed to donor earmarking and funding preferences. The United States and the EU institutions, for example, are reluctant to cede allocation decisions to third parties and therefore do not fund country-pooled funds.

While there is no pooled fund for early action specifically, a number of humanitarian funds are increasingly funding early response through disaster preparedness and DRR activities. These funds include the Central Emergency Response Fund (CERF) and country-based Common Humanitarian Funds (CHF) and Emergency Response Funds (ERF), in addition to development-mandated funds such as the World Bank-managed Global Facility for Disaster Risk Reduction (GFDRR). While all of the humanitarian funds provide examples of funding for early action, such activities remain marginal and it is clear that the full potential of these resources is not being realized.

6.4 Private funding

Humanitarian funding from private sources – including individuals, corporations and foundations – has increased markedly in recent years, more than doubling from $2.1 billion in 2006 to $5.8 billion in 2010.[168] In the same period,

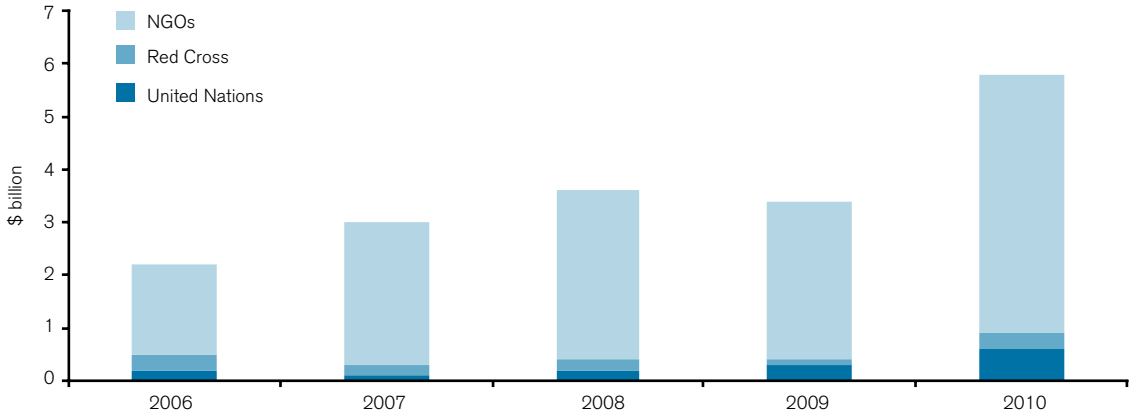
Figure 6.7: Private humanitarian donations by donor group, 2006–10



Source: Development Initiatives (2012a).

168 Stoianova (2012).

Figure 6.8: Private humanitarian donations by recipient, 2006–10 ($bn)



Source: Stoianova (2012).

private donations as a *proportion* of total humanitarian spending increased from 17.1 per cent to 30.9 per cent.[169]

Donations from individuals constitute about three-quarters of private humanitarian aid (Figure 6.7) and are a particularly important source of funding for NGOs, which received 86 per cent of private humanitarian aid from 2006 to 2010 (Figure 6.8). In 2010, NGOs raised $8.7 billion, of which $4.9 billion came from private sources – averaging 57 per cent of NGO humanitarian funding that year.[170]

6.4.1 The CNN effect

Because it does not come from governments, private funding is less politicized and has different risk preferences. Nevertheless, it remains an unreliable source of early funding because it is heavily dependent upon images of suffering that are not available before an emergency. Individual donors tend to mobilize in response to television news reports of high-profile disasters – the so-called 'CNN effect'. Journalists are often reluctant to cover a crisis in its early, less 'newsworthy' phase: one NGO worker interviewed for this research recalled significant challenges in convincing a reporter to travel to Niger in the run-up to the 2010 food crisis in the absence of any 'dead cattle and cracked earth'. Newsworthiness is likely to be further undermined by the apparent regularity of drought in the Horn and Sahel: it is nothing new.

NGOs therefore struggle to launch appeals before food crises reach an acute phase, when they finally receive the attention of the media. For example, UK NGOs did not launch a joint appeal for the 2011 Horn of Africa crisis until 8 July 2011, only a few days before famine was declared in Somalia. The following year, a number of NGOs attempted to launch early appeals in response to the emerging Sahel food crisis, hoping for a more receptive public in the wake of the Somalia famine; however, most struggled to raise significant donations.

According to interviews undertaken for this research among UK NGOs, in 2011 a major media outlet suggested to the DEC (the body that coordinates join NGO appeals) that it might support an appeal for the Sahel based on early warning indicators. The reason for the apparent media appetite for a pre-emptive appeal was perceived to be the 'sensitivity' to criticism among some major media outlets that they were late in reporting the Horn of Africa crisis and had underplayed its severity earlier in the year. Eventually, however, NGOs decided not to proceed with a joint appeal. As Box 4.1 shows, there was no consensus about how bad the situation was likely to become, raising concerns among some NGOs that they might suffer reputational damage with the media should a campaign

169 Development Initiatives (2012a) estimate private donations to humanitarian emergencies amounted to $2.1bn of a total response of $12.3bn (17.07%) in 2006 and $5.8bn of $18.8bn (30.9%) in 2010.

170 Stoianova (2012).

'overhype the situation'. Providing a simple, media-friendly drought narrative was identified as a further challenge: the peak of the crisis was expected to coincide with seasonal rains rather than scorched earth, and a key complicating factor was the existence of conflict in Mali (and prior to that Libya).

NGO fundraising models that are less dependent on emotive images may offer better ways to raise early private funding. In particular, there may be opportunities to partner with corporations to raise early private funding, thereby circumventing the requirement for newsworthy stories and emotive imagery. One potential model for a corporate fundraising partnership sees a small donation made each time a particular transaction takes place, such as when a product or service is purchased. The donation could come from the corporation, customer or both through a matching scheme. Donations could be maximized by making it simple for customers to opt in. For example, the 'Check Out for Children' partnership between UNICEF and Starwood Hotels & Resorts sees hotel guests invited to make a $1 donation to UNICEF by a simple addition to their bill at checkout. A number of governments have taken a similar approach by implementing 'air ticket solidarity levies' – essentially a small tax on air tickets which is hypothecated for development and humanitarian aid.

Another model could be for NGOs to establish high-profile early-action funds, and seek large upfront donations from major corporations. Such a fund could be managed by an individual NGO for its own activities, or potentially collectively at the national or international level in a model something like the CBHA ERF (see Box 6.2), but with upfront contributions provided by companies as part of their Corporate Social Responsibility (CSR) programmes, rather than by governments. As enterprises themselves, corporations should be able to appreciate the business case for early action. But such a scheme may be less attractive to businesses that use their CSR activities primarily for public relations purposes, as the opportunity to donate to high-profile emergencies will be reduced. NGOs may be able to compensate for this by offering appropriate publicity linked to the importance and activities of the fund.

6.4.2 Remittances

Remittances – international money transfers sent by emigrants to recipients in their home (developing) countries – are expected to reach $467 billion by 2014.[171] Although not humanitarian funding *per se*, they are a potentially important source of finance for early action at the community level. A growing evidence base demonstrates the importance of cash interventions as a means to protect assets and avoid destructive coping strategies during crises, suggesting that remittance flows could provide similar benefits.

More research is needed to establish a precise relationship, however. It is commonly held that remittance flows are counter-cyclical – increasing in response to (not necessarily in anticipation of) emergencies – and a variety of studies demonstrate that remittance flows can help populations cope with disasters by funding *ex post* activities – helping households smooth consumption in the immediate aftermath and recover in the longer term. However, there is less evidence of how remittances support early action, particularly in the case of slow-onset droughts.[172] Research in Ethiopia found evidence of remittances supporting community early action, by allowing households to smooth consumption in the early stages of a food crisis and avoid selling off livestock.[173] However, any such early action is likely to be funded by persistent remittance flows rather than a surge in response to drought: evidence indicates that remittances to African countries respond to drought with a considerable delay. Any surge is likely to support recovery rather than early action.[174]

It is certainly clear that remittances form a crucial component of many household incomes in the Horn and Sahel, with 'migration and remittance' often constituting

171 Foresight (2012).
172 Mohapatra et al. (2009).
173 Ibid.
174 Naudé and Bezuidenhout (2012).

a livelihood strategy in and of itself. However, a dependence on remittance flows can also create vulnerabilities. Remittance flows constitute a major part of the Somali economy, with inflows contributing 20–50 per cent of GDP according to one estimate.[175] However, while resilient to events within Somalia, these flows may be vulnerable to events outside the country, as illustrated in early 2012 when a number of American banks responded to US anti-terror laws by ceasing to deal with Somali remittance companies. The 2012 Sahel crisis was compounded by a sharp decline in remittances from Libya (owing to the civil war there) and the return of migrants, creating extra mouths to feed.

Given the important role remittances can play in helping communities cope with and recover from slow-onset food crises, efforts to reduce transaction costs and remove obstacles should be prioritized by policy-makers and financial service providers. Particular issues include the prohibitive costs of transfers through formal channels and a lack of coordination and data-sharing among banks.[176] One estimate suggests that halving such costs could increase recorded remittance flows to sub-Saharan Africa by $2.5 billion a year.[177] The use of mobile phone technologies to send and receive remittances, in much the same way as mobile phones were used to donate to the K4K appeal in Kenya (see Box 3.2), has the potential to drive down costs significantly, move more remittances into formal channels and increase the penetration of remittance flows into remote rural areas.[178] And given the vulnerability of remittance flows to exogenous shocks, innovative approaches to provide investment insurance against, for example, sudden changes in money transfer restrictions, regulation, expropriation of assets, conflict or breach of contract could help increase confidence among diaspora donors and reduce volatility in flows. This could be modelled on the Afghan Investment Guarantee Facility, for example.[179]

6.5 Risk financing

Public and private aid provides important sources of crisis finance, but the tendency for flows to surge *ex post* means that they do relatively little to reduce the risks faced by vulnerable communities. Various reforms to the aid architecture, to increase flexibility, speed access and more closely align humanitarian and development lines can help address this, particularly if combined with steps to better align political and humanitarian risks. However, these reforms are ambitious and will take time to achieve. In the meantime, there are significant opportunities to develop new financing models to manage humanitarian risks.

6.5.1 Reserves and contingency credit

In principle, one way for governments and agencies to ensure rapid access to early financing is to hold contingency reserves which they can draw down in response to early warnings. This approach faces a number of difficulties, however. From the perspective of national governments, any significant reserve is likely to become the focus of political struggle as competing claims for alternative uses emerge from ministries or sectoral interests. Agencies may struggle with similar dynamics, while the charitable status of many NGOs may constrain their ability to hold such a reserve. In all cases, there will be an economic opportunity cost associated with holding a contingency reserve.

As an alternative, governments and agencies can instead borrow to finance early action – taking out a loan when they believe early action is needed. One way to do so is a contingent credit facility. Governments or agencies pay a fee for the option of a guaranteed loan at a pre-agreed rate, contingent on the occurrence of a particular risk event, for example, a drought.[180] Such an arrangement not only locks in a preferential interest rate, but is faster and more predictable than ad hoc borrowing in response to a crisis.

175 Hassan and Chambers (2008).
176 Irving et al. (2010).
177 Ratha et al. (2008).
178 Foresight (2012).
179 See Hammond et al. (2011) for a further discussion of this mechanism and how a similar approach could be developed for Somalia.
180 Of course, the contingency event must be more clearly and objectively defined. One approach could be to use a relevant rainfall index, for example.

The World Bank has arranged post-disaster contingency credit facilities for the governments of Colombia and Mongolia, but there is no reason in principle why similar arrangements cannot be anchored to quantifiable and measurable pre-crisis risk factors such as drought, harvest loss or pasture loss, for example.

Although contingent credit can be cheaper than holding a reserve, the disadvantage is that it increases debt. Therefore, any potential use of contingency credit should be fully evaluated in the light of a government's (or agency's) financial situation.

6.5.2 Insurance

Reserves and credit lines provide crisis finance without transfer of risk, which is retained by the government or agency in question. Insurance provides a means by which humanitarian risks may be transferred – from a government, agency or household – to a third party: the insurer.

However, designing an efficient insurance contract able to finance early action is not straightforward. For early action to be possible, the payout has to come in advance of the emergency phase of the crisis. This means compensation cannot be based on crisis outcomes, such as asset losses, and must instead be anchored to a risk factor, such as drought. The standard way to do this is by linking compensation to a rainfall index, so a payout happens when a drought event, as defined by the rainfall index, occurs.

In addition to providing an early payout, this approach offers a number of other advantages. It reduces costs as there is no need for a process of loss adjustment – the payout is simply calculated on the basis of an independently verified index. And it reduces moral hazard, because losses are calculated according to a formula, and so are independent of the insurer and insured.

However, the approach also has an important drawback. It essentially uses index-defined drought as a proxy for food crisis, but inevitably it is an imperfect one. The index may not perfectly capture the distribution of rainfall in the region in question, for example. But more fundamentally, livelihood impacts are rarely the result of drought alone. The imperfect correlation of a rainfall index with crisis outcomes means that risk transfer is incomplete and a degree of basis risk remains with the insured party.

Box 6.4: The African Risk Capacity initiative

The African Union, with technical assistance from WFP, has initiated the African Risk Capacity (ARC) project. The objective is to establish a pan-African insurance pool to diversify drought risk across the continent and reduce costs: initial estimates indicate potential savings of 50 per cent are possible, though this requires broad geographic participation in order to maximize diversification.

An initial fund would be capitalized with contributions from participating governments and donors. Payouts will be triggered according to a satellite-measured rainfall index and will occur when rainfall is below a drought threshold defined by the participating country. The amount paid out will be calculated using the new *Africa RiskView* model. This translates rainfall data for a particular country into an estimate of response costs. A country's premium will be set according to the amount of risk it wishes to transfer to the pool – defined in terms of the proportion of costs to be covered and the likelihood of a payout being triggered.

As well as pooling risks and reducing costs, the ARC will also provide rapid financing for early action. Governments will have to develop pre-agreed contingency plans identifying how payouts will be used to protect those affected by drought, and payout will happen as soon as the drought threshold is triggered.

The African Union is currently seeking $300 million for initial capitalization.

Source: African Risk Capacity Project Team.

National and regional insurance schemes

Governments can in principle take out insurance against disasters, including drought. However, sovereign disaster insurance contracts tend to be prohibitively expensive for developing countries. Even developed countries have struggled to access affordable insurance against natural hazards.[181]

Insurance costs can be reduced by pooling risks across countries. Because the disaster risks of one country are not perfectly correlated with those of another, pooling results in diversification of risk. A well-known example of this approach is the Caribbean Catastrophe Risk Insurance Facility (CCRIF), where 16 Caribbean countries have taken collective index-based insurance against earthquake and hurricane losses. Pooling of national risks is estimated to have reduced premium costs by 45–50 per cent, and the CCRIF provided the first funds received by the Haiti government after the 2010 earthquake, accounting for half of all funds provided in the first 10 weeks following the catastrophe.[182]

A similar model could work for slow-onset food crises in sub-Saharan Africa, where the African Union and a number of partners are investigating the possibility of establishing a continent-wide insurance pool for drought risks – the African Risk Capacity initiative (see Box 6.4).

Agency insurance

Insurance may also provide a way for agencies to access resources rapidly in advance of a crisis. Insurance mechanisms can be built into programmes to increase flexibility and capacity to rapidly scale up interventions. There is particular potential to link index-based insurance to safety net programmes, which can provide a platform for early action.

One innovative model was pioneered by WFP in Ethiopia, which purchased a rainfall index-based insurance product from Axa Re in 2006. This was intended to help WFP scale up early interventions through the national Productive Safety Net Programme. In return for an annual premium of $930,000 financed by USAID, the contract offered a maximum payout of $7 million in the event of drought. The contract was not triggered in its first year and not renewed in 2007; however, the model provides a promising example of a risk transfer partnership between agency, donor and private sector that can be built upon in the future.

Community-based insurance

Index insurance also has significant potential to transfer humanitarian risks directly from households. Below we consider two promising examples.

The R4 Rural Resilience initiative – the result of a partnership between the Rockefeller Foundation, Oxfam America, WFP and Swiss Re – offers rainfall index-based insurance to rural households in Ethiopia, which can opt to pay their premiums by undertaking work on climate adaptation measures. It promotes a participatory model, in which farmers engage in the design of the insurance package, resulting in a product that is tailored to their needs and well understood. The initiative has expanded rapidly, from 200 households in 2009 to over 13,000 in 2011, with plans to expand further in Ethiopia and three other countries in the next five years. By operating at the community level, the programme is able to target the most vulnerable: 40 per cent of those covered are from female-headed households and 65 per cent are officially registered as chronically food insecure.[183]

As noted earlier, a common problem of rainfall index-based insurance such as the R4 Rural Resilience initiative is basis risk, arising when the index-based payout is not perfectly correlated with actual losses. In order to minimize basis risk, the International Livestock Research Institute (ILRI) has developed an insurance product for pastoralists in the Horn of Africa based not on a rainfall index but on a vegetation index which is more closely correlated with livestock mortality. Payouts can be timed to occur at particular points in the seasonal or livelihood calendar, so that compensation is available to finance appropriate early action and avoid destructive coping strategies.[184]

181 Linnerooth-Bayer et al. (2012).
182 Ibid.
183 Linnerooth-Bayer et al. (2012); Kebede (2012).
184 Chantarat et al. (2012).

Capital market solutions

International capital markets provide an alternative counterparty to which humanitarian risks can be transferred via Catastrophe (or CAT) bonds. These instruments offer investors an above-market rate of interest unless a pre-specified catastrophe occurs, in which case the interest and principal is forgiven and used by the issuer to cover its losses. The pre-specified catastrophe is defined in terms of an index.

From the perspective of the issuer, CAT bonds achieve much the same thing as insurance: they transfer risks in return for a regular fee (the bond's coupon or the insurance premium). CAT bonds are primarily issued by insurers and reinsurers to transfer risks from their portfolios to capital markets; however, they can also be issued by governments, and indeed Mexico has used this approach to hedge its earthquake risk.

6.5.3 The role of donor capital

The risk-financing approaches above offer two important advantages over humanitarian aid:

- Payout is rapid and timely.
- They are apolitical, so manage humanitarian risk (or proxies for this) more effectively.

Nevertheless, they can be prohibitively expensive for poor governments, agencies or communities, and may require significant technical expertise and capacity. Furthermore, they can be easily crowded out by traditional humanitarian aid: a vulnerable government or community confident of a donor response in the event of an emergency is less likely to seek risk financing. There is therefore an important role for donors in supporting the development and expansion of these initiatives through judicious use of subsidies and technical support.

From the donor perspective, there are powerful justifications for doing so. Risk-financing arrangements can help reduce dependency on traditional humanitarian aid and foster broader engagement and dialogue between donors, national governments, agencies and communities on issues of risk, creating valuable spillover benefits in terms of risk reduction.[185] Partnership approaches also allow donors to leverage their scarce resources more effectively. By structuring products to ensure payouts occur in time to finance early action rather than late response, donor returns on investment should increase compared to *ex post* emergency aid. And by paying or subsidizing a regular premium rather than an unpredictable emergency disbursement, donor costs are smoothed.[186]

Realizing the full potential of risk finance requires greater donor engagement. As models are scaled up, costs can be expected to decrease with economies of scale and the accumulation of experience, expertise and data.[187] However, this demands that donors take an approach that is more supportive of innovation, one based on a willingness to experiment, a tolerance of failure and commitment to learn from it, and a process for selecting and building on success.

185 Linerooth-Bayer et al. (2012).
186 Bailey (2012).
187 Linerooth-Bayer et al. (2012).

7. Conclusions and Recommendations

7.1 Current trends point to a negative outlook for famine risk

Despite strong economic growth in many countries of the Horn and Sahel, environmental and demographic changes coupled to low levels of political inclusion and high instability mean that the risk of acute food crises is likely to increase. Conflict and geopolitics act as risk multipliers, meaning that full-blown famine remains a real threat, as was seen most recently in Somalia during 2011.

These trends mean unmet humanitarian needs are increasing in the Horn and Sahel despite increasing donor spending. The use of famine EWS to anticipate and mitigate food crises provides a major opportunity to save more lives, protect more livelihoods, check rising costs and close the widening funding gap.

7.2 The gap between famine early warning and early action is set to widen

To date, however, the international system has been unable to grasp the opportunity provided by famine EWS. Since the first were rolled out across the Horn and Sahel in the 1980s, the sophistication and capability of famine EWS has increased dramatically. Yet this has not delivered a comparable improvement in early action, a divergence that is set to persist.

Continuing advances in remote sensing technology, improvements in weather forecasting and meteorological models, new possibilities from ICT and major opportunities to expand the coverage and capacity of EWS in vulnerable countries and regions point towards an ever-improving predictive capacity. There is much that governments, agencies and early warnings providers can do to facilitate these advances. However, without meaningful reforms in other areas, comparable improvements in early action will not follow.

7.3 An agenda for reform

Three areas for reform are outlined below. They are not independent one from another. Operational reform is enabled by funding reform, itself enabled by institutional reform.

Operational reform

Long-term programmes are needed in vulnerable regions to build community resilience to drought. These must be inherently flexible: able to adapt and scale in response to early warnings and draw from the full toolkit of livelihoods, DRR and humanitarian interventions. This requires a higher degree of operational preparedness and redundancy, closer integration of humanitarian and development programming and new models of joint programming.

Funding reform

Operational reform is heavily dependent on funding reform; donors must create the financial incentives for agencies to make operational reforms by encouraging integration of humanitarian and development work and joint programming. Early action requires development and humanitarian funding lines to be more flexible, more accessible and more easily harmonized and blended. Risk-financing mechanisms are needed to better manage humanitarian risks and increase the reliability and speed of early funding.

Institutional reform

Radical institutional reforms are required to address stifling bureaucratic risk aversion and create a risk management culture in which appropriate early action is incentivized and funding and operational reforms are enabled.

7.4 Aligning political and humanitarian risks can unlock reform

Closer alignment of political and humanitarian risks is fundamental to achieving the reforms outlined above. It will also incentivize appropriate decision-making in both donor and national governments.

In affected countries, a broad, realistic and frank national discourse about food security and hunger should help create a demand for early action and militate against the incentive for government to deny crises. The issue should be discussed and reported on regularly in national parliaments and treated as a cross-party issue. National civil society advocacy and communications should be supported and encouraged, and access to national and international EWI should be maximized and reported in the media.

Civil and political freedoms such as a free press, effective political opposition, regular elections and a vibrant civil society will facilitate any such discourse, and also help ensure access to information and increase government accountability. In the absence of these freedoms, the ability of civil society and the media to create an enabling political environment for early action is greatly reduced.

Decentralized government can increase accountability to vulnerable populations, while capacity-building among these groups is needed to help them engage in political processes. National legislation to establish famine prevention measures in law and formalize Disaster Risk Management institutions may provide frameworks against which government can be held accountable.

Donors are more likely to fund early action where they perceive a clear political upside in doing so. National NGOs can help shift the political risk calculus of donor governments through public campaigns and advocacy, to criticize those that delay and reward those that respond swiftly. By making appeals for early assistance, as the government of Niger did in 2011, affected countries can potentially increase the political costs of delay for donors, should a crisis materialize and they be shown to have ignored requests for help.

Donor governments themselves can seek to manage downside risks, by developing clear public communication materials and aid strategies that explain why early action is justified, and seeking buy-in for early action through parliament or other political institutions. Pooled funds, with some degree of political risk-sharing between donors and with decision-making devolved to NGOs and agencies, may also offer means for donors to manage political risk.

Agencies and early warnings providers need to be sensitive to donor risk preferences. Agencies should develop phased response plans that allow donors to progressively increase their commitment as uncertainty decreases. Early warnings providers should develop approaches to forecast mortality and malnutrition, so that donors can assess risk in terms of the indicators to which they are most responsive.

7.5 Invest in community-based early warning capacity

Some of the most promising investment opportunities lie in empowering vulnerable communities with EWI and the capacity to act. This is particularly urgent in national contexts of low government capacity or where communities are politically marginalized. Beyond capacity-building, governments can create enabling environments for community-based early action by ensuring that public policies support the response strategies of vulnerable groups, and work with early warnings providers and agencies to increase community access to official EWI in an appropriate form.

7.6 The changing donor landscape may have important consequences for the future of early action

Non-DAC donors are playing an increasing role in emergency funding. These governments are likely to have different political risk preferences from Western donors, as was evident during the 2011 Somalia response. They typically make no official distinction between humanitarian and development funding and are able to operate in a flexible manner, relatively unconstrained by contradictory aid principles and often bypassing the structures of the UN relief system.

The differing risk preferences and more flexible *modus operandi* of these donors mean they may find it easier to fund early action in situations where DAC donors are reluctant to do so. As they assume a larger role in humanitarian funding, begin to develop aid strategies and consider how to engage with international aid structures and norms, they have the opportunity to learn from the experience of DAC donors and avoid institutionalizing constraints on early action in the way that many DAC donors have done.

7.7 The need for leadership

Leadership is required on two fronts. Transformational leadership is needed to bring about the fundamental reforms outlined above. Operational leadership is needed if early action is to happen in the meantime.

The reforms outlined above imply major institutional and organizational changes and disruption. Agencies must start to share programmes rather than just information. Humanitarian and development divisions must align and in some contexts integrate. New risk management cultures, with new incentive and accountability frameworks, must be developed. This demands strong and concerted leadership from senior managers in agencies and donors who must communicate a sustained vision to their staff and explain and justify the changes to be made. It also demands strong leadership from donor politicians, to create and preserve the space for change and support senior managers in delivering it.

These reforms will take time, if they happen at all. In the meantime, early action will require that donor and agency staff are prepared to take informed, risk-based decisions in the absence of appropriate incentive structures. This too demands leadership. Those prepared to prioritize humanitarian needs over their own career paths are demonstrating a quality of leadership that is highly prized within the humanitarian system.[188] This kind of operational leadership is not restricted to managers, although they can encourage it by empowering staff to take decisions and providing them with the cover to do so. It is typical of the 'deference to expertise' institutionalized in HROs.

Constrained by operational rigidities and bureaucratic risk aversion, leaders must innovate or create an environment for those around them to do so. Staff will need to experiment with new ways of working, to test the boundaries of existing operational and funding constraints, discarding what fails and taking forward what works. Ensuring continued innovation and adoption of risk-financing mechanisms demands such an approach.

7.8 Test new approaches in 'resilience labs'

The root-and-branch reforms called for in this report will be easier to justify and undertake if they have been tested and shown to work. Resilience labs should be developed in partnership between donors, agencies, early warnings providers and national governments to test new approaches and demonstrate success. These partnerships would develop joint long-term programmes in vulnerable regions to deliver resilient development. There would be a particular emphasis on data collection and monitoring, evaluation and learning. Elements of resilience labs could include:

- Joint long-term programmes between agencies and government, with 'adaptive capacity': the ability to scale and modify in response to early warnings;
- Shared risk management processes with early warning at the centre, including joint risk assessments, dynamic real-time contingency planning and rapid processes for triggering, escalating and taking decisions;
- Incentive structures for appropriate, risk-based decision-making;
- New funding arrangements such as rapid response mechanisms and agency-managed pooled contingency funds;
- Pre-agreed effort-sharing criteria among donors clarifying responsibility for funding early action and against which they can be held accountable; and
- Private-sector partnerships to create innovative risk-financing approaches, built in to programmes and delivered directly to vulnerable communities.

188 Buchanan-Smith and Scriven (2011).

7.9 Recommendations

Specific recommendations based on the opportunities and needs discussed above are presented in tabular form below.

National governments	Donor governments	Agencies (including NGOs)	Early warnings providers
1. Improve official early warning capacity and effectiveness			
1a. Undertake a comprehensive review of national and subnational early warning capacities in vulnerable countries and identify investment and capacity-building priorities on a country-by-country basis.			
1b. Based on the review, develop national EWS through joint funding (multi-donor and national government) and joint resourcing (support and capacity-building from agencies and specialist early warning providers). Ensure all parties have a stake in the EWS, to maximize buy-in and trust, facilitate consensus and diversify the funding base.			
1c. Build horizontal and vertical linkages, based on common protocols and memoranda of understanding, between existing EWS to maximize data-sharing and foster trust, knowledge-sharing and capacity-building.			
1d. Recognize that EWI is a public good and ensure open access to EWI.			
1e. Locate early warning and early action functions at the centre of government, close to the office of president or prime minister.	1f. Develop a formal, independent process to reconcile differences between EWS. This should use the IPC as a common framework and be triggered when EWS differ by one phase or more on the IPC scale, at a threshold of 3 or above.		
1g. Ensure formal processes for reporting of EWI and associated decision-making and implementation.	1h. Explore the opportunities and risks for new technologies to crowdsource or crowdseed early warning data.		
		1h. Develop models to incorporate informal early warning data into analyses and triangulate between formal and informal data sources.	
2. Improve community early warning capacity and effectiveness			
2a. Support the development of community-based EWS among at-risk communities and complement with technical capacity-building and support for preparedness and response planning activities.			
2b. Create an enabling environment for community early action through appropriate public policy.		2c. Tailor early warnings to the needs of vulnerable communities and develop communication and distribution approaches to ensure this information is accessible.	
2d. Maximize access to national EWI through measures to ensure it reaches communities in a timely fashion and appropriate form.			
3. Operational reform			
	3a. Require agencies to demonstrate, through crisis calendars and lead times, that interventions can be delivered in time.	3b. Use crisis calendars and preparedness audits to maximize readiness and ensure appropriate response analysis.	
	3c. Commit to funding 'redundancy' such as permanent staff and pre-positioned supplies (or clarify guidance for doing so).	3d. Develop dynamic, real time, risk-based contingency planning with clear accountability and risk-based triggers.	
3e. Establish 'platforms for early action' in vulnerable regions, based on long-term development, DRR and social protection programmes that build community resilience and can scale and adapt in response to early warning signals to deliver preventive interventions.			
	3f. Develop transparent and objective criteria for when particular interventions are warranted to help achieve consensus in joint response analysis and reduce the influence of extraneous factors.		
	3g. Encourage joint planning by providing funding for inter-agency response analysis or favouring joint proposals over individual agency ones.	3h. Make joint response plans priority deliverables for Humanitarian Coordinators and Country Directors.	

National governments	Donor governments	Agencies (including NGOs)	Early warnings providers
	3i. Develop pooled funds based on the UK CBHA Emergency Response Fund model, with NGOs and UN agencies jointly responsible for agreeing how funds are allocated, to improve inter-agency cooperation.		
	3j. Develop processes and organizational structures to maximize engagement and planning between humanitarian and development staff.	3k. OCHA could dispatch independent experts to assist with joint planning processes in response to early warning triggers.	
	3l. Fund joint programmes and specify funding preferences for integrated programmes.	3m. Develop organizational change plans to achieve closer operational integration between humanitarian and development divisions.	
	3n. Encourage cooperation and partnership between humanitarian and development professionals through shared objectives and planning processes.	3o. Develop joint strategies with shared objectives and risk assessments or joint programmes.	
4. Funding reform			
4a. Establish, support and capitalize the ARC pooled insurance fund.		4b. Use pooled funds more aggressively to access early financing.	
4c. Build index-based insurance and other risk financing mechanisms into long-term development and safety net programmes.			
4d. Develop and expand community-level index-based insurance.			
4e. Work with private sector (financial services and ICT companies) to reduce obstacles to remittances, for example by fostering competition and reducing prohibitive transaction fees, ensuring appropriate legal and regulatory environments in home and host countries, developing insurance mechanisms to insulate flows from exogenous shocks.			
	4f. Reform business models and funding mechanisms to increase flexibility, improve access and achieve closer integration of development and humanitarian funding lines.	4g. Explore innovative partnerships with the private sector to mobilize early donations.	
	4h. Support early action through pooled funds, in particular, the CERF and CHFs.		
	4i. DAC and non-DAC donors could explore new dialogues on how best to enable early action.		
	4j. Develop rules on burden-sharing or division of labour for funding early action.		
5. Institutional reform			
	5a. Develop incentives for appropriate risk taking through the introduction of rewards and the removal of disincentives, for example through institutional cover.		
	5b. Develop clear processes for triggering, escalating, recording and justifying decisions, whether to respond or not.		
	5c. Gather data on the efficacy of early action and emergency response; undertake CBAs to build the economic case for early action.		.
	5d. Where the capacity exists to do so, decentralize decision-making to empower staff with the best situation knowledge and greatest sense of accountability to vulnerable communities.		
	5e. Engender a culture of open communication about risks; encourage staff to report concerns, errors, threats to programmatic outcomes.		
	5f. Develop institutional risk management strategy that identifies risks to organizational objectives, clearly articulates risk appetite and the rationale for assuming risk, explains how risks should be monitored and managed, and why early action is central to this.		
5g. Develop partnership approaches through joint risk assessments, joint strategies and contingency plans and shared objectives. Engender frank and open communication about different stakeholder risks; seek to manage risks rather than transferring them onto other organizations.			

National governments	Donor governments	Agencies (including NGOs)	Early warnings providers
6. Align national government political risks with humanitarian risks			
6a. Ensure civil and political freedoms including a free press, vibrant civil society and effective political opposition.	6b. Use diplomacy to encourage appropriate civil and political reform.	6c. Where possible, NGOs should support national civil society organizations with awareness raising, advocacy and campaigns on national hunger and food security.	
6d. Legislate to establish famine prevention measures and broader Disaster Risk Management in national law.	6e. Use smart diplomacy to encourage national governments to take early action when needed. Strategies should be sensitive to government risk preferences, for example, supporting 'low media profile' early action.		
6f. Adopt decentralized models of government to increase accountability to local populations.	6g. Support initiatives to build the capacity of vulnerable and marginalized populations to engage in relevant political and decision-making processes.		
6h. Develop long-term development programmes in vulnerable regions able to deliver early preventive action without generating the political costs of high-profile emergency response.			
6i. Treat EWI as a public good and take appropriate measures to maximize access to official EWI among all groups.			
7. Align donor government political risks with humanitarian risks			
7a. Make public appeals for assistance to donors based on early warnings.	7b. Develop clear public communications justifying why early action is important to achieving development and humanitarian objectives.	7c. NGOs should undertake advocacy and communications work to reward governments for early action and punish them for delay.	7d. Develop methodologies to forecast outcome indicators to which donors are most 'risk sensitive', in particular, mortality and malnutrition.
7e. Reduce corruption and improve transparency to present an attractive risk profile.	7f. Seek domestic buy-in for a strategy of early action through political institutions such as parliament. Seek to make early-action a cross-party issue.	7g. Develop phased response plans that are sensitive to donor risk preferences, starting with no-regret and least-regret options, and specifying triggers and decision points.	
	7h. Develop pooled funds with early funding modalities to help donors share political risks and insulate decision-making from political agendas.		

Appendix A: Organizations with Staff Interviewed for this Research

Afrique Verte
AGRHYMET, Niamey
Agricultural Market Observatory, Mali
Agriculture Ministry, Government of Niger
CARE International
CILSS
Commission for the 3N Programme, Government of Niger
DEC
DFID
ECHO
FAO
Feinstein International Centre, Tufts University
FEWSNET
Food Security Commission, Government of Mali
FSNAU
German Ministry of Foreign Affairs
Program on Humanitarian Policy and Conflict Research, Harvard University
IFRC
Institut du Sahel
IPC
Islamic Relief
Japanese Ministry of Foreign Affairs
Ministry of State for the Development of Northern Kenya and other Arid Lands, Government of Kenya
OCHA
ODI
OECD
Office of the President, Mali
Oxfam
Plan International
Regional Governor's Office, Tillabéri, Niger
SAP, Office of the Prime Minister, Niger
Sasakawa Africa Association
Save the Children
Social Safety Net Unit, Office of the Prime Minister, Niger
Tearfund
UNEP
UNICEF
UNISDR
USAID
WFP
World Bank GFDRR
World Vision

Appendix B: Estimates of Mortality in Drought-related Disasters Since 1970

Year	Location	Estimated mortality
1969–74	Sahel (Mauritania, Mali, Chad, Niger, Burkina Faso)	101,000 (a)
1972–73	India	130,000 (a)
1972–75	Ethiopia (Wollo &Tigray)	200,000–500,000 (a)
1974–75	Somalia	20,000 (drought and government policy) (a)
1980–81	Uganda (Karamoja)	30,000 (drought + conflict) (a)
1980–85	Sahel (Ghana, the Gambia, Burkina Faso, Benin, Mali, Mauritania, Niger)	No data available
1982–85	Mozambique	100,000 (drought + conflict) (a)
1983–85	Ethiopia	590,000–1,000,000 (drought + conflict) (a)
1984–85	Sudan (Darfur, Kordofan)	250,000 (a)
1991–93	Somalia	300,000–500,000 (drought + conflict) (a)
1998	Sudan (Bahr el Ghazal)	70,000 (drought + conflict) (a)
2000	Ethiopia	70,000–120,000 (b)
2005	Niger	10,000–50,000 (c)
2005–06	Horn of Africa (Kenya, Somalia, Ethiopia, Djibouti)	<1,000 (d)
2008	Horn of Africa (Kenya, Somalia, Ethiopia)	<1,000 (d)
2010	Sahel (Niger, Chad, Senegal, Burkina Faso, Mauritania, Mali, Niger)	<1,000 (d)
2011	Horn of Africa (Kenya, Somalia, Ethiopia)	>10,000 (e) (drought + conflict)
2012	Sahel (Niger, Mali, Mauritania, Burkina Faso, Chad)	<1,000 (d) (drought + conflict)

Sources: (a) Devereux (2000); (b) Devereux (2011); (c) Rubin (2009a); (d) CRED; (e) Slim (2012).

Note: Data limitations and the challenges of estimating excess mortality mean these figures should be treated with caution. Where reliable data are unavailable but relatively low mortality is suspected, a conservative placeholder of less than 1,000 has been used.

Appendix C: Famine Early Warning Systems: Users, Uses and Data

Different users of, and uses for, famine EWS

	Examples	Users	Uses
International	• FEWSNET • GIEWS • HEWS	• Donors • UN agencies • International NGOs	• Monitoring • Deciding whether to respond • Deciding how to respond • Prioritization of activities and allocation of resources
Regional	• CILSS • IGAD • FSNWG	• Partner governments • UN agencies and international NGOs operating in the region	• Monitoring • Building consensus and sharing information • Deciding how to respond collectively • Coordinating response
National	• Ethiopia • Niger	• National government • Local government	• Monitoring • Deciding whether to respond • Deciding how to respond • Allocation of resources • Appealing for assistance
Community	• Garba Tulla Radio Network	• Communities and households	• Monitoring • Deciding whether to respond • Appealing for assistance

Source: Chatham House.

Selected types of famine early warning data

	Description	Examples
Meteorological	Rainfall forecasts, particularly during crucial rainy seasons, may provide some of the earliest warning of future livelihood stress.	FEWSNET warned in 2010 of the possibility of a *La Niña*-related drought in the Horn of Africa in 2011, and subsequently issued multiple warnings highlighting the risks posed by poor rainfall in Somalia. FEWSNET partners with NOAA and NASA in the generation of weather and climatic data.
Pest	Locust infestations can be anticipated and mitigated on the basis of regional locust breeding and migration data.	The FAO Desert Locust Early Warning System uses field teams to collect data on locust breeding patterns and combines this with remote sensing data and weather data to model future plague dynamics and inform interventions to manage upsurges.
Harvest	Estimates of in country food production may provide early warning of local food deficits.	National harvest data where they are reliable and timely. Where not, remote sensing can provide useful data. For example, NASA generates data on vegetation cover for FEWSNET as a means to estimate local crop production in the absence of reliable data.
Market and trade	Local prices for food, livestock and labour (wages) provide data on the accessibility of food. International food prices may provide early warning of localized price spikes. Food trade flows through ports and border crossings provide information on food availability and the extent to which market mechanisms are addressing deficits.	FEWSNET produces regular price bulletins for vulnerable countries and monitors food flows and availability in order to assess local food security. GIEWS produces regular estimates of cereal supply/demand balances for vulnerable countries in order to assess food needs.
Population movement	Population movement can be an indicator of severe stress in the region from which migration is occurring. Areas to which affected populations are migrating are likely to require significant humanitarian assistance.	Migration is a common coping strategy, particularly among pastoralist communities, during unexceptional years. So EWS must be able to distinguish between usual and unusual patterns.
Livelihood	Various household data related to the particular livelihood and coping strategies of vulnerable populations can provide information as to the degree of stress people are facing.	Among pastoralist communities, important data might include livestock holdings and animal health, for example. Household surveys can provide data on coping strategies.
Health	Data on malnutrition and mortality rates determine the severity of a particular crisis. Increases relative to baselines indicate a worsening situation.	FSNAU conducts regular health assessments in Somalia. The reliance of health data on surveys, which are time-consuming, periodical and dependent upon sufficient access to affected populations, may present a problem.

Source: Chatham House.

Appendix D: Early Warning System Capacity in the Horn of Africa and the Sahel

Country	National	Regional	International		EWS capacity rating (national-led system with regional and international support) 1 = weak 5 = strong
	Government EWS capacity	Regional capacity-building and support	FEWS NET capacity	World Food Programme Vulnerability Analysis and Mapping	
Burkina Faso	Crop production and nutrition data provided through the government Food Security Information System. Poor coordination of data within government and collection, management and analysis of EWI perceived to be weak by civil society. Significant delays in reporting of data. Initial work on adoption of IPC system.	Permanent Interstate Committee on Drought Control (CILSS) under ECOWAS – supports countries in weather, crop and food security information collection.	National	Comprehensive Food Security and Vulnerability Mapping (CFSVA) provides an in-depth pre-crisis baseline on food consumption, education, nutrition, markets and livelihoods.	3
Chad	Weak capacity in nationally owned EWS with poor data collection and analysis systems. Little political importance placed on government EWS, with no funding mechanisms to support information-gathering and analysis. Attempts to initiate a new government run EWS in 2013 and initial work on adoption of IPC standards.	CILSS	National	CFSVA and Food Security Monitoring System (FSMS) to provide ongoing analysis of food security conditions.	2
Djibouti	'Embryonic' Emergency Weather Alert System and food security EWS, although a lack of coordination between different sources of EWI hampers effectiveness. IPC standards adopted and analysis ongoing.	Intergovernmental Authority on Development (IGAD) – regional focus on drought EWS although perceived to be more useful as a political forum rather than operation EWS.	National	FSMS only	2
Ethiopia	Long-established food security EWS and sophisticated weather risk management system called Livelihoods, Early Assessment and Protection that collects remote sensor data from automated weather stations. Strong linkages between national and local levels with the regular collection of early warning data provided by district authorities. Annual surveys and statistical information feed early warning systems, with EWS located within an effective bureaucratic structure. Some tension reported between national and international EWS providers regarding analysis of early warning information. Initial work on adoption of IPC standards.	IGAD	National	CFSVA and FSMS	4
Eritrea	Considered to be an EWS 'black-spot' by food security analysts with a lack of government buy-in for systems and poor international coverage from service providers. Limited data collection systems and a lack of political will to assess food security risk factors.	IGAD	None	None	1

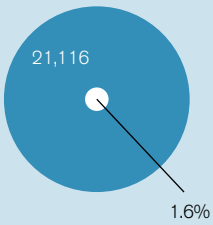
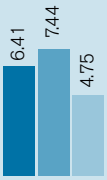
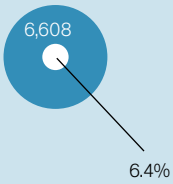
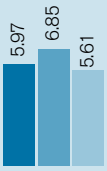
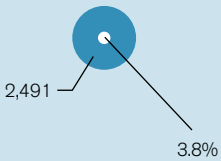
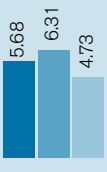
Country	National	Regional	International		EWS capacity rating (national-led system with regional and international support) 1 = weak 5 = strong
	Government EWS capacity	Regional capacity-building and support	FEWS NET capacity	World Food Programme Vulnerability Analysis and Mapping	
Gambia	Gambia national early warning system for weather-related risks in development (as of 2012), although some coverage provided by a stronger Senegalese system. Initial work on adoption of IPC standards.	CILSS	None	CFSVA and FSMS	2
Kenya	National-level early warning system led by the Kenya Food Security Steering Group, with IPC standards adopted and analysis ongoing. However, Kenyan EWS were found wanting in 2011, when the growing crisis in the northern drylands went largely unrecognized until May. Food security sector uses drought EWI at community level linked to information from national meteorological stations. Bi-monthly meetings with FEWSNET staff to assess drought food security risk.	IGAD	National	CFSVA only	4
Mali	National food security EWS that incorporates drought risks, although capacity is limited and systematic data collection is weak. National Directorate of Meteorology assesses, monitors and disseminates rainfall data for drought-affected areas. EWS perceived to be weak by civil society sources with a lack of trust and criticisms regarding lack of transparency. Poorly connected to district and commune levels, with macro-level crop availability used to provide food security estimates. Initial work on adoption of IPC standards.	CILSS	National	CFSVA only	3
Mauritania	No operational EWS owing to resource and coordination challenges – reliant on World Food Programme estimates of food insecurity. Primary data collection by UN and international agencies, although civil society groups welcome government coordination to allow joint analysis of markets, food security and nutrition data. Initial work on adoption of IPC standards.	CILSS	National	CFSVA and FSMS	2
Niger	EWS based on national systems and integrated within government structures perceived to be strong, although technical issues around data collection and analysis remain. Strong linkages between national and local level officials with EWS in place at central, regional, sub-regional, municipal and community levels. Closely linked to donor funding of early action with bi-monthly meetings between government officials and donors. Initial work on adoption of IPC standards.	CILSS	National	FSMS only	4

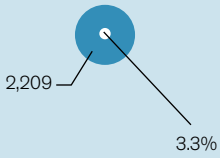
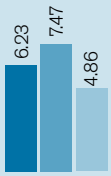
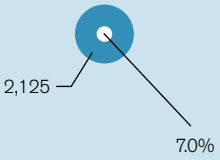
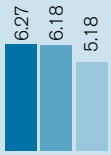
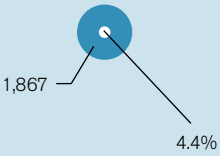
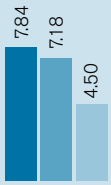
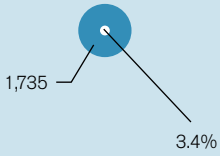
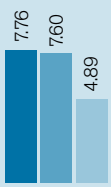
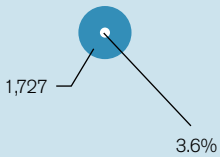
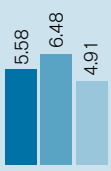
Country	National	Regional	International		EWS capacity rating (national-led system with regional and international support) 1 = weak 5 = strong
	Government EWS capacity	Regional capacity-building and support	FEWS NET capacity	World Food Programme Vulnerability Analysis and Mapping	
Senegal	National Weather Agency and Food Security Early Warning System and host of a regional meteorological centre, although the lack of a national EW management system limits comprehensive analysis. No adoption of IPC standards.	CILSS	Remote	CFSVA and FSMS	3
Somalia	Very strong international coverage although EWS operated outside government structures owing to lack of institutional capacity. Food security and nutrition analysis provided by FEWSNET and Food Security and Nutrition Analysis Unit (FSNAU) – a comprehensive livelihoods analysis-based warning system. IPC system established with ongoing analysis.	IGAD	National in partnership with FSNAU	FSMS only	4
South Sudan	Limited national coverage provided by government, with EWS provided by FEWSNET. Capacity perceived to be seriously deficient by food security analysts, with a lack of information on food access at local levels and reliance on annual crop estimates. Sudan Institutional Capacity Programme: Food Security Informational Action (SIFSIA) run by the FAO aims to build capacity and provide EWI. IPC system adopted and ongoing analysis.	IGAD	National	CFSVA and FSMS	2
Sudan	Limited national coverage provided by government, with EWS provided by FEWSNET. Lack of information on food access at local levels with dependency on annual crop estimates to provide EWI. Sudan Institutional Capacity Programme: Food Security Informational Action (SIFSIA) run by the FAO aims to build capacity and provide EWI. IPC system adopted and analysis ongoing.	IGAD	National	CFSVA and FSMS	3

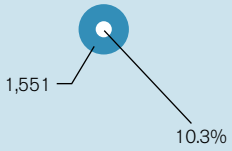
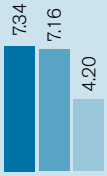
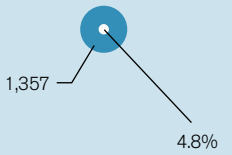
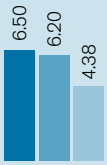
Sources: UNISDR (2011); FAO/WFP/USAID (2012); Oxfam International (2012); Tefft et al. (2006); Prevention Web; FEWSNET.

Note: Rating for early warning system capacity provided by Chatham House, based upon government self-assessment of performance of Hyogo Framework for Action Priority Area 2 on early warning systems and capacity, available literature and interviews with UN and agency staff. 1 = weak capacity with poor national coverage and a lack of support from international service providers. 5 = strong national coverage and institutional ownership with support from international service providers such as FEWSNET.

Appendix E: Overview of Early Funding for Top 10 Humanitarian Donors

	Humanitarian spend 2006–10 ($m)	Percentage prevention and preparedness	HRI score Flexibility Timeliness Prevention	Constraints and enablers to financing early action
United States				• A complicated humanitarian aid architecture 'makes it difficult for the US to respond in a coherent and consistent way [to humanitarian crises]'. (OECD-DAC 2011) • Overall predictability of humanitarian financing is reduced by reliance on Congressional supplementary appropriations – which can slow response and 'lead to delays in providing funds to partners'. (OECD-DAC 2011) • USAID does not have a contingency drawdown fund for new emergencies, which could enable quick funding for trusted partners. (OECD-DAC 2011) • The US has provided limited contributions to the CERF, 'although it does not support country-level pooled funding' – which could enable early response owing to pre-positioning. (OECD-DAC 2011) • NGO partners note that 'long proposal formats are not suited to emergency response', which can slow implementation of activities. (OECD-DAC 2011) • US anti-terror legislation through the Patriot Act (2001) prohibits material support to terrorist organizations, which inhibited early action in Somalia during 2011, for example. • The US 'still ties almost a third of its aid to the delivery of US good and services' – which can slow procurement and delivery times. (OECD-DAC 2011/ DARA 2012)
European Commission				• Complex financial instruments 'lead to difficulties in creating synergies and timeliness' between development and humanitarian arms of the European Union. (OECD-DAC 2012) • Lack of flexibility and centralized decision-making hampers redeployment of development funding or scaling up spending in times of crisis - 'leading to overreliance on and stretching of humanitarian funds'. (OECD-DAC 2012) • A 'high administrative and compliance burden', which 'forces partners and ECHO staff to focus their time and resources on compliance, resulting in less space for strategic thinking and analysis, and limiting programme flexibility in volatile crisis environments'. (OECD-DAC 2012) • There is currently 'no formal process in the field to promote systemic joint analysis, or to ensure that humanitarian issues are taken up in development country strategies' – therefore missing linkages between these two areas. (OECD-DAC 2012) • European Commission Humanitarian Office (ECHO) funding through the Humanitarian Instrument can take an average of three months for dispersal 'delaying the delivery of aid to those in need and putting pressure on partners to deliver expected results despite reduces timeframes'. (OECD-DAC 2012) • ECHO is limited to providing short-term funding and does not provide multi-annual funding to partners – 'therefore limiting more strategic engagement from partners in fragile contexts'. (OECD-DAC 2012)
United Kingdom				• Humanitarian Policy – Saving Lives, Preventing Suffering and Building Resilience (2011) outlines priority areas and explicitly attempts to link development and humanitarian action, and 'new ways of acting quickly in slow-onset disasters'. • A major review of DFID response in the Horn of Africa noted that its humanitarian system 'lacked flexibility to respond to the emerging crisis' in the region. (ICAI 2012) • Highly centralized funding decisions: in the Horn of Africa crisis in 2011, all humanitarian expenditure required sign-off by the Secretary of State, 'a process which took place quickly and provided a high level of oversight, but required much work to prepare and multiple layers of review'. A new Rapid Response Fund promises rapid dispersal of funds – although also requires sign-off from the Secretary of State. (ICAI 2012) • A key supporter of pooled funds with the UK government the largest contributor to the CERF in 2010 and 2011. The UK government was the largest contributor to pooled funds in Kenya, Somalia and Ethiopia in 2011, which in Ethiopia 'was essential to enabling early response'. (ICAI 2012)

	Humanitarian spend 2006–10 ($m)	Percentage prevention and preparedness	HRI score Flexibility Timeliness Prevention	Constraints and enablers to financing early action
Canada				• No cross-government humanitarian strategy with an outline of objectives and results – which could clarify the role between development and humanitarian funding lines. (OECD-DAC 2012) • The International Humanitarian Assistance sub-clause mandates funding for DRR under humanitarian lines but not under development lines – this constrains the scope and potential for integrated early action and places the 'prevention' burden on humanitarian programmes. (OECD-DAC 2012) • Significant level of earmarking for funds – in 2010 Canada provided only 12% of its funding as unearmarked. (DARA 2012) • Canada is a strong supporter of the CERF with multi-annual funding commitments and 'has vowed to increase its funding for pooled mechanisms'. (DARA 2012) • Despite pre-arranged contractual arrangements with humanitarian NGOs, dispersal of funding remains slow – up to three months in the case of the Horn of Africa crisis owing to bottlenecks in the approval process (OECD-DAC 2012)
Japan				• Strong policy and institutional framework, but no single overarching humanitarian policy – which could create challenges in linking development and humanitarian instruments. (OECD-DAC 2010) • Dispatch of Japan Overseas Relief Teams (1987) legislation, which requires a request from a government or an international organization to enable response following natural or man-made disasters could constrain early response. (OECD-DAC 2010) • Japanese NGOs commented on cumbersome procedures, arduous reporting and a lack of funding predictability for recovery activities. (OECD-DAC 2010) • Heavy earmarking for funding to multilaterals. (OECD-DAC 2010) • Multilateral agencies and NGOs receiving Japanese humanitarian funding 'find some of the procedures complex and time consuming'. (OECD-DAC 2010) • Field staff note that the use of pooled funds 'is not encouraged' to 'maintain the visibility of Japanese aid'. (OECD-DAC 2010)
Norway				• Unlike many other OECD-DAC donors, Norway has a specific policy on 'Prevention of Humanitarian Crises' and humanitarian policy incorporates strong elements of anticipation and prevention. (DARA 2012) • Flexible and predictable funding provisions – with a large proportion of funds unearmarked and delivered through UN multilateral agencies. (DARA 2012) • Norway allocates approximately 70% of its total humanitarian budget in the first quarter of the calendar year – 'providing a high degree of timeliness in humanitarian aid'. (DARA 2012)
Sweden				• Sweden is a 'predictable' donor that provides 'timely funding' for partners, works through multilateral organizations and provides allocations to consolidated appeals and pooled funds. (DARA 2012) • A framework agreement with CSO partners with pre-positioned funds 'allows agencies the discretion to allocate prepositioned funds for emergency operations with little recourse to SIDA'. (OECD-DAC 2009) • Sweden combines humanitarian and development teams at the country level – 'making it easier to create linkages between these areas of programming'. (DARA 2012) • Swedish humanitarian funding is unearmarked and NGO and multilateral grants in emergencies have a streamlined process and are exempt from formal approval by the SIDA project committee – facilitating timely funding. (OECD-DAC 2009)
Germany				• A 'lack of clarity' regarding division of labour and linkages between humanitarian and development programmes 'can limit effectiveness and speed of action for implementing agencies'. (OECD-DAC 2010) • Segregation between development and humanitarian aid within Germany's aid architecture 'translates into different funding proposals and reporting systems, which makes situations of protracted crises and overlap among sectors difficult to navigate and increases transaction costs'. (DARA 2012) • Only 9 per cent of humanitarian aid is unearmarked. (DARA 2012) • Funding from the Emergency Relief Budget is always earmarked; eligibility is strictly defined, with NGO funding for a maximum of six months. (OECD-DAC 2010) • BMZ offers a particular budget line on transitional aid to bridge the gap between humanitarian aid and long-term development. (DARA 2012)

	Humanitarian spend 2006–10 ($m)	Percentage prevention and preparedness	HRI score Flexibility Timeliness Prevention	Constraints and enablers to financing early action
Australia				• Integration of humanitarian action into country programmes 'lends itself to good links between development and humanitarian programming', although 'linkages between development and humanitarian financial instruments remain weak'. (OECD-DAC 2008) • Earmarking by sector in humanitarian aid spending, although AusAid 'allows flexibility for programmes to decide how they can fund within these sectors'. (OECD-DAC 2008) • Ability to transfer development funds to crisis response. • Provides standby funding arrangements for NGOs with simplified, fast-track access. (DARA 2012) • Fosters long-term humanitarian funding arrangements with agencies 'to improve responsiveness to emergencies'. (DARA 2012)
Spain				• Complex and fragmented architecture: aid is allocated by 14 ministries at the national level and a series of subnational actors. (OECD-DAC 2011) • A relatively high level of tied aid – only 77% untied to low-income countries (LICs). (OECD-DAC 2011) • Spain has a policy of providing humanitarian funding in three annual tranches – 'partners report that this has negatively affected their operations, especially in crises where the bulk of costs are incurred in the first few weeks'. (OECD-DAC 2011) • Multi-annual funding to NGOs working in protracted crises, 'allowing them flexibility to adapt to the evolving situation and pick up on emerging opportunities to support community recovery'. (OECD-DAC 2011) • Spain encourages the 'early deployment' of development funding in crises 'rather than stretching the humanitarian dollar'. (OECD-DAC 2011)

Sources: Humanitarian spending and prevention and preparedness percentages – OECD-DAC database statistics, available at http://www.oecd.org/dac/stats/. HRI Index, flexibility, timeliness and prevention – DARA (2011). Constraints and enablers to action – OECD, *DAC Country Peer Reviews* (Paris: OECD), available at http://www.oecd.org/dac/peer-reviews/; DARA (2011); ICAI (2012).

Notes: For the flexibility, timeliness and prevention scores, DARA assesses donors against a number of qualitative and quantitative criteria, with 10 denoting the highest possible performance and 1 the lowest. By way of comparison, the average donor performance was 6.05.

Appendix F: Pooled Funds and Early Action

Fund	CERF		CHF		ERF		GFDRR	
Full name of fund	Central Emergency Response Fund		Common Humanitarian Fund		Emergency Response Fund		Global Facility for Disaster Reduction and Recovery	
Coverage	Global		National		National		Global/national	
Support to CAPs	Yes		Yes		No		No	
Donors	DAC Non-DAC Private sector		DAC Non-DAC Private sector		DAC Non-DAC Private sector		DAC Non-DAC	
	2011	**2012**	**2011**	**2012**	**2011**	**2012**	**2011***	**2012***
Highest donor contributors (top 3, US$)	United Kingdom: $94,280,000 Sweden: $74,483,671 Norway: $67,966,752	United Kingdom: $95,148,000 Norway: $73,945,027 Sweden: $72,132,873	United Kingdom: $157,281,088 Sweden: $54,450,275 Netherlands: $38,575,000	United Kingdom: $155,754,910 Sweden: $67,244,309 Norway: $45,124,400	United Kingdom: $21,865,501 Sweden: $17,988,478 Norway: $8,911,677	United Kingdom: $23,955,652 Germany: $15,544,041 Sweden: $11,676,639	Australia: $14,925,000 Sweden: $9,122 ,000 Japan: $6,000,000	European Commission: $44,331,000 United Kingdom: $10,036,000 Sweden: $9,717,000
Implementing agencies	UN agencies		UN agencies and NGOs		UN agencies and NGOs		Governments, UN agencies, NGOs	
Mandate	Humanitarian		Humanitarian		Humanitarian		Development	
Managed by	OCHA		OCHA		OCHA		World Bank	
Financially administered by	UNDP		UNDP		UNDP		World Bank	
Main activities	Emergency response		Planned response		Emergency response		Risk reduction, recovery, adaptation	
Total contributions 2012 (US$)		$465,221,933		$409,048,917		$141,008,296		$94,891,000

Source: OCHA Financial Tracking Service (FTS).
Note: GFDRR figures are recorded for the fiscal year July 1–June 30.

Central Emergency Response Fund

The OCHA-administered CERF is the largest humanitarian pooled fund. It operates at the international level and offers rapid access to UN agencies. A five-year evaluation of the CERF found it offered one of the most rapid funding mechanisms available to UN agencies. The CERF is less beneficial for NGOs, which, unlike UN agencies, are unable to access finance directly and must rely on funds to be channelled through UN partners. While the average time from application to disbursement for UN agencies for rapid response grants was four weeks, it was 13 weeks for NGOs.[189]

Rapid access does not necessarily mean the CERF provides a good source of early funding for slow-onset crises, however: if the CERF's guidance prohibits funding for preventive interventions and preparedness, then swift approval and disbursal processes are irrelevant as far as early action goes. On paper, the CERF does appear somewhat constrained in its ability to fund early action: interventions are limited to one year and must be for 'life-saving' activities. Despite this,

189 Channel Research (2011).

there are examples of agencies successfully using the CERF to fund limited early action.[190] For example, in the second half of 2011, the CERF provided $12 million to Ethiopia, Kenya and Sudan for disaster preparedness activities, although this was a tiny fraction of the total $426 million provided in that year.[191]

Leveraging the full potential of the CERF for early action requires at a minimum improved guidance, clarifying the types and extent of early action that can be funded. Going further, a new window for early action, with distinct funding modalities, could increase the CERF's contribution to crisis prevention. Such a window could be 'opened' in response to a pre-defined trigger, such as a forecast that a particular country will reach Phase 4 ('emergency') on the IPC food insecurity classification, for example. In order to avoid conflicts of interest, careful consideration would need to be given to the question of who should be responsible for the analysis and how to insulate them from donor or agency agendas. FEWNSET is best placed to generate forecasts and is operated independently to its funder, USAID. If needed, an independent peer review or verification process could rapidly evaluate forecasts which activate the funding trigger.

Common Humanitarian Funds (CHFs)

There are currently five CHFs in operation: in Sudan, South Sudan, Somalia, the Democratic Republic of the Congo and the Central African Republic. These are UN-managed multi-donor funds that operate at the national level, providing funds to support the national CAP and address needs identified in the country's Common Humanitarian Action Plan (CHAP). They aim to make funding more predictable and flexible in contexts of ongoing humanitarian emergency and are intended to be used strategically rather than reactively. Unlike the CERF, CHFs are accessible to NGOs participating in the national CAP.

The CHFs attract significant funding, totalling $364 million in 2011.[192] There has been some success in using CHFs to fund early action, but they are far from used to their full potential. In 2011, the DRC, Sudan and Somalia CHFs between them dispersed $8.7 million for preparedness activities, an increase on 2009 and 2010, but still a modest proportion of overall CHF funding in these crises (around 3.9 per cent of the overall total).[193]

Emergency Response Funds (ERFs)

Like CHFs, ERFs are also nationally focused with direct access for NGOs, but are smaller in scale, and support smaller projects of up to six months. In contrast to CHFs, ERFs are intended to support unforeseen humanitarian needs – they are primarily reactive as opposed to strategic. Despite their reactive nature and short-term mandate, several ERFs have disbursed funding to emergency preparedness projects, in some cases quite significant amounts. For example, in 2010, the Kenyan ERF spent 20 per cent of its budget on flood preparedness.[194] On balance, however, the short-term reactive nature of ERFs means their potential to avert slow-onset food crises is more limited than that of CHFs.

190 Lautze et al. (2012).
191 Kellet and Sweeney (2011b).
192 Development Initiative (2012b).
193 Kellet and Sparks (2012).
194 Ibid.

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CHATHAM HOUSE

Chatham House, 10 St James's Square, London SW1Y 4LE
T: +44 (0)20 7957 5700 E: contact@chathamhouse.org
F: +44 (0)20 7957 5710 www.chathamhouse.org

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