



**Dare to prepare:  
taking risk seriously**  
Compendium of background resources

Compiled by Jan Kellett and Katie Peters

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# Preface

Having an adequate, sustainable national system of emergency preparedness requires substantial investment. It starts with a careful investigation into the nature of risk, whether natural or man-made. An assessment of existing capacity will make it clear if current structures and processes are strong and flexible enough to prepare for these risks. If not, actions will be needed to build that capacity, from institution building and legislation through to contingency plans and stockpiling. And each of these actions will need financing. Where national capacity is surpassed, international systems should be ready to provide support, in some contexts playing an essential role in driving forward risk management.

National governments in need of those preparedness systems often struggle to establish the necessary policy frameworks, institutional architecture or fiscal policy to generate the financial resources to support these systems. They are not supported by the international system who – unfortunately at the moment – repeatedly fail to invest in preparedness through official development assistance. NGOs and civil society organisations are often the only ones taking action on the ground, but with relatively small and unpredictable budgets; action is largely characterised by short-term project based interventions.

Yet despite the dearth of attention to emergency preparedness, there are stories of good practice: of agencies switching resources to take action before a crisis hits; of donors taking flexible approaches to support more appropriate interventions; and of lives and livelihoods saved because of effective preparedness measures. The incentive structures that influence how funding is spent need to be altered to better support this kind of progress. Financing affects what we do much more than we'd like to acknowledge: it is the availability of funding, fiscal priorities and the financing architecture that shapes how money is distributed. This is our starting point, to look at the reality of financing for emergency preparedness across a range of contrasting country contexts.

This Compendium contains the background papers that informed the report *Dare to prepare: taking risk seriously* (Kellett and Peters, 2014). The report – supported by a Summary version and video – was launched on behalf of the IASC in Geneva, Rome and New York. This Compendium, while written with the intention of being documents internal to the Inter Agency Standing Committee's Task Team and Advisory Panel on financing emergency preparedness, contains a wealth of information valuable to others who champion the preparedness cause.

Our message is clear and simple: we can continue to work as we are, to invest in preparedness in the aftermath of a crisis, through piecemeal and short-term projects and through largely international rather than national systems. But this is futile. Change is needed and change is what is recommended: international financing systems must encourage (not stifle) risk based approaches to humanitarian and development action. We hope that our research efforts go somewhat towards affecting the change that is required.

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**#dare to prepare**

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# Acronyms

<b>3N</b>	Initiative 3N « Les Nigériens Nourrissent les Nigériens »	<b>CCC</b>	Climate Change Commission
<b>3/4Ws</b>	who, what, where (and when)	<b>CDDRM</b>	Canada Caribbean Disaster Risk Management Fund
<b>AADMER</b>	ASEAN Agreement on Disaster Management and Emergency Response	<b>CCRIF</b>	Caribbean Catastrophe Risk Insurance Facility
<b>ACP</b>	Africa, Caribbean and Pacific	<b>CDAC</b>	Communicating with Disaster Affected Communities
<b>ACTED</b>	Agency for Technical Cooperation and Development	<b>CDEMA</b>	Caribbean Disaster Emergency Management Agency
<b>ADB</b>	Asian Development Bank	<b>CDERA</b>	Caribbean Disaster Emergency Response Agency
<b>ADPC</b>	Asian Disaster Preparedness Centre	<b>CDP</b>	Centre for Disaster Preparedness
<b>AfDB</b>	African Development Bank	<b>CDRMP</b>	Comprehensive Disaster Risk Management Programme
<b>AGERCA</b>	<i>Alliance pour la gestion des risques et la continuité des activités</i>	<b>CDRMP</b>	Caribbean Disaster Risk Management Program
<b>AMAT</b>	Adaptation Monitoring and Assessment Tool	<b>CDRU</b>	CARICOM Disaster Relief Unit
<b>ARC</b>	African Risk Capacity	<b>CEA</b>	cost-effectiveness analysis
<b>ARMM</b>	Autonomous Region in Muslim Mindanao	<b>CERF</b>	Central Emergency Response Fund
<b>ASEAN</b>	Association of Southeast Asian Nations	<b>CEWARN</b>	Conflict Early Warning and Response Network
<b>AWD</b>	acute watery diarrhoea	<b>CFSAM</b>	Crop and Food Supply Assessment Mission
<b>B/C ratio</b>	benefit–cost ratio	<b>CHF</b>	Common Humanitarian Fund
<b>BCPR</b>	Bureau for Crisis Prevention and Recovery	<b>CIDA</b>	Canadian International Development Agency
<b>BSPP</b>	Burmese Socialist Programme Party	<b>CIF</b>	Climate Investment Funds
<b>CAED</b>	<i>Cadre de Coopération de l'Aide Externe au Développement</i> (Committee of Aid Effectiveness)	<b>CISA</b>	Inter-Ministerial Council on Food Security
<b>CAED</b>	Development Assistance Coordination Mechanism	<b>CNGRD</b>	<i>Comité National de Gestion des Risques et des Désastres</i> (National Disaster Risk Management Committee)
<b>CAP</b>	Consolidated Appeal Process	<b>CNSA</b>	<i>Coordination Nationale de la Sécurité Alimentaire</i> (National Committee for Food Security)
<b>CARICOM</b>	Caribbean Community and Common Market	<b>COU</b>	<i>Centre d'Opération d'Urgence</i> (Emergency Operations Centre)
<b>CAS</b>	Country Assistance Strategy	<b>CPA</b>	Comprehensive Peace Agreement
<b>CBA</b>	cost–benefit analysis	<b>CPR</b>	Crisis Prevention and Recovery
<b>CBO</b>	community-based organisation		
<b>CCA</b>	climate change adaptation		
<b>CCACG</b>	<i>Cellule Crise Alimentaire et Gestion des Catastrophes</i> (Food Crisis and Disaster Management Unit)		

<b>CRC</b>	Commission for Controlling the Desert Locust in the Central Region	<b>EU</b>	European Union
<b>CRMA</b>	Crisis and Recovery Mapping and Analysis Project	<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>CSO</b>	civil society organisation	<b>FEMA</b>	Federal Emergency Management Agency
<b>DAC</b>	Development Assistance Committee (OECD)	<b>FEWSNET</b>	Famine Early Warning System Network
<b>DCPSF</b>	Darfur Community Peace and Stabilisation Fund	<b>FTS</b>	Financial Tracking Service
<b>DESINVENTAR</b>	Disaster Inventory System	<b>GACI</b>	<i>Groupe d'Appui de la Coopération Internationale</i> (International Cooperation Support Group)
<b>DFID</b>	Department for International Development (UK)	<b>GDACS</b>	Global Disaster Alert and Coordination System
<b>DILG</b>	Department of Interior and Local Government	<b>GDP</b>	gross domestic product
<b>DINEPA</b>	National Water and Sanitation Directorate	<b>GEF</b>	Global Environment Facility
<b>DIPECHO</b>	Disaster Preparedness Programme of the European Commission's Humanitarian Aid department	<b>GFDRR</b>	Global Facility for Disaster Reduction and Recovery
<b>DLCO</b>	Desert Locust Control Organisation	<b>GHA</b>	Global Humanitarian Assistance
<b>DLIS</b>	Desert Locust Information Service	<b>GIS</b>	geographical information system
<b>DMIS</b>	Disaster Management Information System	<b>GLOF</b>	glacial lake outburst flood
<b>DoH</b>	Department of Health	<b>GoH</b>	Government of Haiti
<b>DPC</b>	<i>Direction de la Protection Civile</i> (Directorate of Civil Protection)	<b>GoM</b>	Government of Myanmar
<b>DREF</b>	Disaster Relief Emergency Funds	<b>GoN</b>	Government of Nepal
<b>DRM</b>	disaster risk management	<b>GoS</b>	Government of the Republic of Sudan
<b>DRR</b>	disaster risk reduction	<b>GRID</b>	Global Resource Information Database (UNEP)
<b>DSWD</b>	Department of Social Welfare and Development	<b>HAC</b>	Humanitarian Aid Commission
<b>EAP</b>	East Asia and Pacific region	<b>HAP</b>	Humanitarian Action Plan
<b>ECB</b>	emergency capacity building	<b>HC</b>	High Commissioner
<b>ECHO</b>	Humanitarian Aid and Civil Protection Department of the European Commission	<b>HCCD</b>	High Council for Civil Defence
<b>ECOWAS</b>	Economic Community of West African States	<b>HCENR</b>	Higher Council for Environment and Natural Resources
<b>EPRP</b>	Emergency Preparedness and Response Package	<b>HCT</b>	humanitarian country team
<b>ERF</b>	Emergency Response Fund	<b>HDCS</b>	Humanitarian and Development Coordination Section
<b>ERR</b>	economic rate of return	<b>HDI</b>	Human Development Index
<b>ERRF</b>	Emergency Relief Response Fund	<b>HFA</b>	Hyogo Framework for Action
		<b>HIP</b>	Humanitarian Implementation Plan
		<b>HRF</b>	Humanitarian Relief Fund
		<b>HTG</b>	Haitian Gourde

<b>IACNDR</b>	Inter-American Committee of Natural Disaster Reduction	<b>LIFT</b>	Livelihoods and Food Security Trust Fund
<b>IACP</b>	Inter-Agency Contingency Plan	<b>MAPDRR</b>	Myanmar Action Plan for Disaster Risk Reduction
<b>IAEA</b>	International Atomic Energy Agency	<b>MCA</b>	multi-criteria analysis
<b>IASC</b>	Inter-Agency Standing Committee	<b>MCA4Climate</b>	Multicriteria Analysis for Climate Change
<b>IASP</b>	Inter-American Strategic Plan for Policy on Vulnerability Reduction, Risk Management and Disaster Response	<b>MCC</b>	Management Committee of the Council
<b>IBRD</b>	International Bank for Reconstruction and Development	<b>MDB</b>	multi-lateral development bank
<b>ICPAC</b>	International Climate Prediction and Applications Centre	<b>MDGs</b>	Millennium Development Goals
<b>ICRC</b>	International Committee of the Red Cross	<b>MDPA</b>	Myanmar Disaster Preparedness Agency
<b>IDA</b>	International Development Association	<b>MDTF</b>	multi-donor trust fund
<b>IDB</b>	Inter-American Development Bank	<b>MGB</b>	Mines and Geosciences Bureau
<b>IDP</b>	internally displaced person	<b>MICT</b>	<i>Ministère de l'Intérieur et des Collectivités Territoriales</i> (Ministry for the Interior and Territorial Collectives)
<b>IFAD</b>	International Fund for Agricultural Development	<b>MILF</b>	Moro Islamic Liberation Front
<b>IFC</b>	International Finance Corporation	<b>MIMU</b>	Myanmar Information Management Unit
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies	<b>MINUSTAH</b>	United Nations Stabilization Mission in Haiti
<b>IGAD</b>	Inter Governmental Authority on Drought	<b>MISP</b>	Minimal Initial Service Package
<b>IHLCA</b>	Integrated Household Living Conditions Assessment	<b>MoA</b>	Ministry of Agriculture
<b>ILO</b>	International Labour Organization	<b>MoH</b>	Ministry of Health
<b>IMF</b>	International Monetary Fund	<b>MPC</b>	Myanmar Peace Centre
<b>IMWG</b>	Information Management Working Group	<b>MPCE</b>	Ministry of Planning and External Cooperation
<b>INGO</b>	international non-governmental organisation	<b>MRSC</b>	Myanmar Red Cross Society
<b>INSARAG</b>	International Search and Rescue Advisory Group	<b>MSP</b>	Ministry of Public Health and Population
<b>IOM</b>	International Organization for Migration	<b>MSWRR</b>	Ministry of Social Welfare, Relief and Resettlement
<b>IPC</b>	Integrated Food Security Phase Classification	<b>MTEF</b>	medium term expenditure framework
<b>ISDR</b>	UN International Strategy for Disaster Reduction	<b>NAPA</b>	National Adaptation Programme of Action
<b>JICA</b>	Japanese International Cooperation Agency	<b>NDCC</b>	National Disaster Coordinating Council
<b>LDC</b>	least developed country	<b>NDI</b>	National Democratic Institute
<b>LDCF</b>	Least Developed Country Fund	<b>NDMA</b>	National Disaster Management Authority
<b>LGU</b>	local government unit	<b>NDPCC</b>	National Disaster Preparedness Central Committee
		<b>NDRRMP</b>	National Disaster Risk Reduction and Development Plan
		<b>NEDA</b>	National Economic and Development Authority

<b>NGO</b>	non-governmental organisation	<b>PNRC</b>	Philippines National Red Cross
<b>NMAID</b>	Nuba Mountains International Association for Development	<b>PPCR</b>	Pilot Program for Climate Resilience
<b>NPA</b>	New People's Army	<b>PRSP</b>	Poverty Reduction Strategy Paper
<b>NPV</b>	net present value	<b>PSNP</b>	Productive Safety Net Programme
<b>NRRC</b>	Nepal Risk Reduction Consortium	<b>PUGRD</b>	<i>Projet d'urgence de gestion des risques et des catastres</i> (Emergency Recovery and Disaster Management Project)
<b>NSDRM</b>	National Strategy for Disaster Risk Management	<b>RBMS</b>	results-based management system
<b>OAS</b>	Organization of American States	<b>RC</b>	Regional Commissioner
<b> OCD</b>	Office of Civil Defence	<b>RCSO</b>	UN Resident Coordinators Support Office
<b>OCHA</b>	United Nations Office for the Coordination of Humanitarian Affairs	<b>RRD</b>	Relief and Resettlement Department
<b>ODA</b>	Official Development Assistance	<b>RRMP</b>	Rapid Response to the Movement of Populations
<b>ODI</b>	Overseas Development Institute	<b>RRW</b>	Rapid Response Window
<b>OECD</b>	Organisation for Economic Co-operation and Development	<b>RUTF</b>	ready to use therapeutic foods
<b>OECD/DAC</b>	Organisation for Economic Co-operation and Development/Development Assistance Committee	<b>SAP</b>	<i>Système d'Alerte Précoce</i>
<b>OFDA</b>	Office of the United States Foreign Disaster Assistance	<b>SC</b>	Sub-Committee
<b>OFID</b>	OPEC Fund for International Development	<b>SCF</b>	Strategic Climate Fund
<b>OIE</b>	World Organisation for Animal Health	<b>SCOVA</b>	Sudan Council of Voluntary Agencies
<b>OPAPP</b>	Presidential Adviser on the Peace Process	<b>SDTF</b>	single-donor trust fund
<b>OPDES</b>	<i>Organisation Pré-Désastre et de Secours</i> (Pre-Disaster and Relief Organisation)	<b>SIDS</b>	Small Island Developing State
<b>OPEC</b>	Organization of the Petroleum Exporting Countries	<b>SIFSIA</b>	Sudan Institutional Capacity Programme: Food Security Information for Action.
<b>PAF</b>	performance and accountability framework	<b>SMA</b>	Sudan Meteorological Authority
<b>PAGASA</b>	Philippine Atmospheric Geophysical and Astronomical Services Administration	<b>SNAP</b>	Strategic National Action Plan
<b>PAHO</b>	Pan-American Health Organization	<b>SNGRD</b>	<i>Système National de Gestion des Risques et des Désastres</i> (National Disaster Risk Management Framework)
<b>PAMANA</b>	Payapa at Masaganang Pamayanan	<b>SPCR</b>	Strategic Program for Climate Resilience
<b>PBF</b>	UN Peacebuilding Fund	<b>SPDC</b>	State Peace and Development Council
<b>PBSP</b>	Philippines Business for Social Progress	<b>SPGRD</b>	Permanent Secretariat of Risk Management and Disaster
<b>PDES</b>	Economic and Social Development Programme	<b>SPLM</b>	Sudan People's Liberation Movement
<b>PDNA</b>	post-disaster needs assessments	<b>SRA</b>	Strategic Reserve Authority
<b>PDP</b>	Philippines Development Plan		

<b>SRC</b>	Sudanese Red Crescent	<b>UNESCAP</b>	United Nations Economic and Social Commission for Asia and the Pacific
<b>TDC</b>	<i>Tables de Concertations</i>	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>TEERR</b>	The Economics of Early Response and Resilience	<b>UNFPA</b>	United Nations Population Fund
<b>TRAC</b>	Target for Resources Assignment from the Core	<b>UNHABITAT</b>	United Nations Human Settlements Programme
<b>TS</b>	<i>Tables Sectorielles</i>	<b>UNHCR</b>	Office of the United Nations High Commissioner for Refugees
<b>TTF</b>	Thematic Trust Fund	<b>UNICEF</b>	United Nations Children's Organisation
<b>UFE</b>	Underfunded Emergency	<b>UNIDO</b>	United Nations Industrial Development Organization
<b>UN</b>	United Nations	<b>UNISDR</b>	United Nations International Strategy for Disaster Reduction
<b>UN RCHC</b>	UN resident coordinator/humanitarian coordinator	<b>UNOPS</b>	United Nations Office for Project Services
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS	<b>UNPD</b>	United Nations Procurement Division
<b>UNAMID</b>	United Nations Mission in Darfur	<b>USAID</b>	US Agency for International Development
<b>UNCT</b>	UN country team	<b>USGS</b>	US Geological Survey
<b>UNDAC</b>	United Nations Disaster Assessment and Coordination	<b>VAM</b>	vulnerability analysis and mapping
<b>UNDAF</b>	United Nations Development Assistance Framework	<b>VCA</b>	vulnerability and capacity assessment
<b>UNDG</b>	UN Development Group	<b>WASH</b>	Water, Sanitation and Hygiene
<b>UNDP</b>	United Nations Development Programme	<b>WFP</b>	World Food Programme
<b>UNDRO</b>	United Nations Disaster Relief Organization	<b>WHO</b>	World Health Organization
<b>UNEP</b>	United Nations Environment Programme	<b>WMO</b>	World Meteorological Organization

# Country case studies

# Case study: financing of emergency preparedness in the Philippines

Jan Kellett

## Summary

Tackling disaster risk is central to the business of development in the Philippines<sup>1</sup>. Tackling this risk stretches from prevention and preparedness to growth and development and the achievement of the Millennium Development Goals (MDGs), as well as being a key element of national security. There is a highly risk-aware culture across both government and civil society and an environment where disaster risk is a shared political concern, with considerable momentum across society for ensuring it remains central to the country's national consciousness. This momentum has been fuelled by a changing risk profile that has brought hazards to areas previously thought safe.

Over a period of nearly 40 years the Philippines, which has been continually affected by both extensive and high-impact intensive disasters, has steadily evolved from disaster response, to disaster management, to disaster risk management (DRM) – and finally to the reduction of risk. This has culminated in comprehensive legislation, a framework and detailed plan of action, and the development of key institutions. Such is the country's progress that the Philippine's evolution to comprehensive risk reduction is often recommended as a model for other countries to follow.

## National leadership

Under the umbrella of this DRM legislation, emergency preparedness is clearly part of the agenda, and considerable strides have been made in implementation. The technical elements of early warning and hazard mapping are considerably advanced, programmes are being rolled out countrywide to build local capacity, and response institutions' processes and tools have been upgraded. The scale and scope of work and the number of partners is impressive. One large programme that is targeted on river basins is alone working in 500 municipalities across 40 provinces, building community preparedness through risk-mapping and contingency planning down to the local level, providing training, and setting up incident command centres.

There are issues to address however. Coordination among key agencies is uneven. The dissemination of

early warning is in need of improvement. In some areas logistics, resources and equipment for basic response are missing. Many of those interviewed mention the lack of transparency of the work done, and the money spent, as a concern. The biggest single issue, however, is that greater understanding is needed of who is doing what, where, with which money – something that is the responsibility of the Government under its 2010 Act on Disaster Risk Reduction and Management (DRRM). This lack of understanding is at the very least giving rise to confusion and could be leading to duplication or gaps in delivery.

It is at a local level that most concerns about preparedness exist. Legislation places a considerable responsibility on local actors, who, for a mix of both bureaucratic and financial reasons, do not necessarily have the resources to do all the work necessary. The poorest municipalities are of particular concern, with insufficient financing to meet their responsibilities under the act, while their communities are highly vulnerable. Some municipalities have less than US\$25,000 a year in total tax revenue to fulfil all their duties and obligations. Funding for preparedness may in some cases be just a fraction of that, as little as just over US\$1,000 a year (using current guidelines.) Even with funding from other sources such as rents, the poorest municipalities are under considerable financial pressure when it comes to delivering on preparedness.

National government agencies, meanwhile, generally report few problems with the financing of emergency preparedness activities, and the funds the government has committed to disaster risk in general are considerable – more than US\$1 billion in 2011 in stand-alone financing (Jose, 2012). To put this in perspective, the international community spent only slightly more than this on disaster risk reduction (DRR) across the entire world in 2011 (Kellett and Caravani, 2013).

## International support

In the Philippines, the international community has followed the government's lead by making disaster risk a clear part of its own contribution to the country's development. Almost all the key frameworks, policy documents, programme strategies and project work plans articulate disaster risk in some way or other. The work specifically on emergency preparedness spans a range of actors, from development to humanitarian. Initiatives vary from training on relatively

<sup>1</sup> Note that this document is based largely upon a field mission to Manila in March 2013. It does not, for example, include the impact of Typhoon Haiyan on both financing and policy for emergency preparedness in the Philippines.

narrow issues such as Sphere standards for local officials or building search and rescue capacity, to assisting in drawing up multi-hazard, multi-actor, wide-ranging contingency plans. Risk assessments help direct preparedness activities. Positioning and contingency planning undertaken by the international community has contributed significantly to reducing loss of life and the impact of disasters. Highly specific and tailored trainings build capacity in camp management, emergency health management, and search and rescue.

Despite the good work being done (and interviewees suggest standards are in general very high) there are clear areas for improvement. An objective view of the landscape of initiatives suggests that emergency preparedness is fragmented along a set of fault lines (Kellett and Sweeney, 2011): short- and long-term, humanitarian and development aid, conflict and disaster, the international system and national actors. In fact in some particular ways the international community is much less coherent in its work in emergency preparedness than the government itself.

Broadly speaking, the international community's engagement with risk in the Philippines can be broken down into two halves. The first is the development community, represented by the United Nations Development Assistance Framework (UNDAF) and development bank frameworks, with the United Nations Resident Coordinator's Office (UNRCO), United Nations Development Programme (UNDP) and development banks as key actors, supported by other UN agencies and NGOs with development mandates. This work is broadly speaking focused on supporting the government DRM legislation. The other half is the humanitarian community, driven onwards by a need to respond to and prepare for regular crises with its clearest articulation seen in humanitarian action plans and appeals, where preparedness for response is essential 'now.' Neither of these perspectives is wrong within the current way in which the international community works but the division between the two halves informs a series of inter-related issues to address: lack of clarity on mandates and responsibilities, the lack of a concrete plan of action, minimal capacity to manage the complexity of risk issues, and inadequate coordination systems.

The outcome of this split is a fragmented approach to the international community's approach to risk management, one that is arguably inefficient and fails to deliver both short-term support to government and, especially, long-term sustainable capacity. In addition this fragmentation diminishes the overall impact of some of the good work that is being done.

Financing for the international community largely reinforces this divide. Very little money for emergency preparedness comes from global tools and mechanisms. Bilateral humanitarian financing mostly focuses on

narrowly conceived preparedness for response, and bilateral development funding focuses on long-term, usually expensive early warning investment. At present, humanitarian financing for preparedness capacity is very focused on crisis response, and questions remain about how sustainable this can be, given the short-term nature of the funding, the nature of the work, and especially the fact that it is unlikely to be well-integrated into development processes. There is a missing element in the middle that does not appear to be funded: helping build long-term risk-governance capacity.

### Conflict largely a separate issue

Preparedness for conflict (which is largely confined to the island of Mindanao) is meanwhile somewhat separate from the large-scale work connected to disasters. Although government agencies under the DRRM act have a rather unclear mandate with regard to these conflict-affected populations, this has not, according to interviews, prevented them from undertaking valuable work in preparedness in the region, both for disaster and conflict risk. Several interviewees raised concerns about potential conflict of interests for these agencies, without being specific as to the scale and scope, a concern that was beyond the resources of this report to investigate. Meanwhile the international community has only a few projects that focus on preparedness for conflict alone, even though it is undertaking a considerable amount of work across Mindanao. Conflict may be seen as being less important at this point, given the recent peace deal that will lead to the creation of a new authority. But past history— including the conflict in Sabah in April 2013 — suggests otherwise, and indicates that vigilance is needed, as similar deals have ended in renewed violence.

### Recommendations for (and beyond) financing

This paper's recommendations for government recognise that levels of funding for emergencies is not the main issue at the national level. Funds appear to be adequate for the task at hand; in fact for the full range of DRR activities the government is clearly investing far more than the international community. The government should focus on delivering on the act itself, while also tackling head-on the issues brought to the surface after two years of implementation under the act — implementation that has often been in the teeth of significant and repeated crises. Key to this work is progressing on issues of coherence and coordination across government agencies (including disaster and climate risk) and transferring significant investments into early warning and risk analysis into adequate communication. Local level preparedness requires particular attention, with resourcing and capacity in general to undertake risk management significantly uneven across municipalities.

Government should also examine the possibilities of better leveraging wider civil society for preparedness, especially

through the diaspora and the billions of dollars sent home each year as remittances, and from the growing private sector. Both have potential in terms of financing; government engagement with them, under the DRRM act and its plan, could reap funding as well as drawing more stakeholders into the overall objective of reducing disaster risk. Even relatively simple approaches like persuading families to save and invest remittances, rather than spend, may build community resilience. However, it is quite clear that neither of these sources can replace the necessary investment needed in institutional preparedness.

For the international community there is the potential to move beyond existing financing sources. The donor base, especially for risk management, is narrow. Five or six OECD DAC donors contribute to the Philippines, but not at all for risk-related issues, and implementing agencies should, with support of government, advocate for their investment in preparedness. There may well be opportunities beyond the usual set of donors, such as China, which is investing heavily in the country. This should be coupled with direct engagement with development donors (and here we include the development banks as well) not just humanitarians, even though the latter funds much of the risk-related work in the country. Development actors should be encouraged to engage by linking risk management to long-term development and delivery of the MDGs (and their successor) clearly a key issue for the Philippines. Throughout all this attention must be focused on financing the gap between crisis-focused preparedness and longer-term technical issues, in which exists a need for support for more general long-term and comprehensive risk-governance support.

These financing issues and recommendations are only half the story for the international community. Much can be done without one single extra dollar of spending through tackling head-on issues of fragmentation. The international community needs to take stock of what is needed and where it is needed. It should draw this information into a clear plan of action for emergency preparedness, probably best situated as long-term support to the government legislation, a plan act that also articulates agencies' and organisations' comparative advantages. This will require, from within the UN system, clarity on roles and responsibilities, and beyond it, a much stronger coordination across a range of international actors. Above all else, despite the many risks the country faces and the crises that occur, there needs to be a shift of emphasis, prioritising investment on risk management (and therefore preparedness) significantly above response investments, with appropriate shifts in funding, planning and coordination by the international system.

## Summary

The overall picture for emergency preparedness in the Philippines is largely positive. There are probably few examples of a developing context where so much is

happening in risk management and fewer still where the consciousness of risk is so high. The government has issues to address in delivering under the act, especially at the local level. For the international community, improved financing for emergency preparedness will help meet the unmet needs within its area of support and expertise, but it is clear those needs are much more about the structure of the system (and the financing channels that reinforce it) and less about the actual volume of funding.

The time is ripe for this further development of risk management in the country. Both national and international actors should seize the opportunity of a likely successor to the Hyogo Framework for Action (HFA), to the MDGs and of a new climate treaty, to focus attention once more on the inter-connections between risk and development.

## The risk context

### The risk profile

The Philippines is one of the most disaster-prone countries in the world. Floods, droughts, typhoons, landslides, mudslides, earthquakes, even volcanoes and tsunamis, repeatedly strike the country. According to the 2012 World Risk Report the country is ranked 3rd out of 173 countries for disaster risk (UN University and Nature Conservancy, 2012). Disasters are both high-impact and long lasting. Of particular significance is the high risk of many different kinds of disasters and the proportion of the population exposed to these disasters.

**Table 1. Natural hazards in the Philippines: population exposed and country ranking<sup>2</sup>**

Hazard type	Population exposed	Country ranking
Cyclone	16,267,090	2 <sup>nd</sup> out of 89
Drought	2,173,490	33 <sup>rd</sup> out of 184
Flood	788,572	8 <sup>th</sup> out of 162
Landslide	110,704	4 <sup>th</sup> out of 162
Earthquake	12,182,454	2 <sup>nd</sup> out of 153
Tsunami	894,848	5 <sup>th</sup> out of 76

Source: Prevention Web.

Between 2004 and 2013, the country experienced 170 natural disasters, including 76 tropical cyclones and 63 floods. Nearly 66 million people have been affected by these disasters, with much of this figure accounted for

<sup>2</sup> Adapted from <http://www.preventionweb.net/english/countries/statistics/risk.php?cid=135>, accessed in August 2013.

by the same populations suffering time and again from disasters, especially typhoons and flooding. More than 60% of the country's land area is exposed to multiple natural hazards:<sup>3</sup>

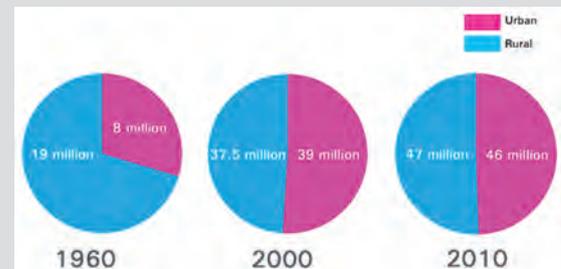
- Tropical cyclones: The most damaging and recurrent disasters in the Philippines, more than 20 cyclones hit the eastern coast of the country between June and December each year.
- Droughts: Though not severe every year, droughts have had a significant impact in the past, including as recently as 2010.
- Floods: Often caused by the accompanying high winds and intense rainfall of typhoons, flooding affects many of the country's river basins each year. In many cases this natural hazard is compounded by improper drainage and dam construction, and an under-investment in maintenance.<sup>4</sup>
- Landslides: Often exacerbated by both legal and illegal deforestation, the country's typhoons, floods, and even 'regular' rainfall, have led to devastating landslides. The most recent of significant impact occurred in 2006.
- Earthquakes: Lying across several fault lines, the Philippines is prone to geological hazards: 20 or so earthquakes occur every day across the country. Subsequent tsunamis are subsequently not uncommon.
- Volcanoes: 22 of the country's 300 volcanoes are considered to be active.

The economic exposure to all these hazards is considerable, with as much as US\$140 billion exposed to at least one hazard type (a figure which does not include drought) – equivalent to over half the country's gross domestic product (GDP)<sup>5</sup>. Unsurprisingly then the economic impact of major disasters has been significant. Typhoon Ketsana in 2009 alone caused at least US\$4.4 billion of damage and loss (World Bank, United Nations, Philippines Government, 2009). According to the World Bank, between 1970 and 2000, the Philippines suffered an average annual direct damage of US\$363 million (World Bank 2005b), with indirect losses likely to mean that the overall cost has been considerably higher.

Meanwhile there are concerns for the ability of the country to tackle future disaster risks. On the one hand the already high exposure rates are compounded by very high population growth, with the Philippines' 1.7% annual growth only exceeded by 6 of the other 58 countries

across the Asia and Pacific (UNESCAP, 2011). The country's population has almost doubled since 1980 and more than tripled since 1960.

**Figure 1. Urbanisation and population growth in the Philippines**



Source: Philippine Centre For Investigative Journalism.<sup>6</sup>

This population growth is accompanied by rapid urbanisation, with the current annual figure of 3% one of the highest in Southeast Asia. This is of considerable concern given relatively weak urban and land-use governance. This largely unplanned urbanisation is exposing more and more people and assets to risk.

The nature of risk itself gives rise to concern. On the one hand there is the apparently changing course of typhoon tracks, with areas of the country that traditionally only suffered a few tropical storms in a lifetime being repeatedly hit. The Philippines Development Plan (PDP) for example, lists provinces by how likely they are to suffer a tropical cyclone. Davao Oriental was one of the provinces least likely to face a typhoon (only 1 in 30 years), but in 2011 it was struck by Typhoon Washi, followed by Typhoon Bopha the following year (Philippines Government, 2010, p. 299). Some of the areas affected by recent typhoons had reportedly not seen one for over a century (Box 1). There is also concern over a hazard that has not been seen for some time in urban areas: a major earthquake. The Philippines has not seen a major quake hit an urban area since Luzon City in 1990. There are

### Box 1. Climate change and changing risk

According to the PDP recent years have seen "extreme events and severe climatic anomalies recorded, such as heat waves, intense rains and floods, droughts, and an increasing frequency of typhoons and tropical storms." (Philippines Government, 2010, p. 301.) Government projections to 2015 predict widespread warming across the country, with the number of days above 35 degrees expected to rise significantly. In some areas extreme rainfall is predicted, in other areas a decrease in rainfall.

<sup>3</sup> Of the total land area, 22.3% is exposed to three or more hazards. And in that area, 36.4% of the population is exposed. Areas where two or more hazards are prevalent comprise 62.2% of the country (World Bank 2005a).

<sup>4</sup> Note that the flood population exposure figure in the Table 1 (taken from Prevention Web) is considerably lower than might be expected if those affected by flooding in recent years in Metro Manila are added. (At the time the Office of Civil Defence [OCD] stated that up to 2.68 million people were affected.)

<sup>5</sup> Economic exposure from Prevention Web. Philippines GDP was US\$224.75 billion in 2011 (current prices.)

<sup>6</sup> Taken from <http://pcij.org/stories/urbanization-by-the-numbers/>.

considerable fears of what a sizeable quake may do to Metro Manila and its population of more than 12 million. Three models were tested for the most recent detailed analysis, and the worst-case scenario was 170,000 homes destroyed and 34,000 lives lost (JICA, MMDA and PHIVOLCS, 2004).

The third concerns vulnerability and particularly how it intersects with natural hazards<sup>7</sup>. Poverty in the Philippines is largely concentrated in rural areas. According to the PDP, the north areas of Luzon and the national capital (and surrounding regions) have some of the lowest rates, attributed to higher access to employment and basic services. Six regions have poverty rates above 40%. These regions encompass the bulk of the 32 provinces with poverty rates higher than 40%, and 16 of these 32 are hit by typhoons at least once a year (Philippines Government, 2010, pp. 299-300). Rural areas are certainly not uniquely affected by disasters, however. A recent report suggests a growing trend towards impacts on marginalised urban communities, citing the flooding in Cagayan de Oro in 2011, and especially Typhoon Ketsana, with 90% of the latter's damage having been sustained by poor urban households (UNISDR and ESCAP, 2012, p. xxiii). While there are disparities within the country, comparisons to other countries are also important; in the Philippines, "a cyclone of the same intensity would kill 17 times more Filipinos (than Japanese) due to the nation's greater level of vulnerability" (IDMC, 2013).

## Conflict in the Philippines

Not all risks in the Philippines are natural. Some considerable ones have been distinctly man-made over the last several decades. According to the European Commission, these "man-made disasters place the Philippines among high-risk countries resulting from armed conflict/militarisation/terrorist incidents, deforestation, mining, fire, pollution, development aggression" (European Community, 2006, p. 58). It may be fair to say that the country has, through continual attempts, managed to turn the corner on large-scale violence, especially with the signing of the recent peace deal in Mindanao (where much of the secessionist violence had its origins.) Nevertheless, the sudden outbreak of violence on the island of Sabah in April 2013 suggests that the vulnerability associated with long-term conflict remains, and indicates that both vigilance and preparedness are needed. The government is considerably frank on the challenge of conflict and post-conflict scenarios across the country, and the links between conflict, natural hazard, and national security:

*"Aggravating the many natural disasters are human-induced disasters like terrorist activities, civil disturbances, hijacking and hostage taking incidents. These disasters and crises cause public anxiety, loss of lives, destruction of properties and even socio-political instability. The country continues to be confronted with internal security threats coming from a protracted communist insurgency and a secessionist rebellion in parts of Mindanao as well as the proliferation of private armed groups (PAGs). This is further aggravated by the existence of the terrorist Abu Sayyaf Group (ASG) with its links to international terror group[s]."* (Philippines Government, 2010 p. 223)

According to the Office of the Presidential Adviser on the Peace Process (OPAPP), there are five on-going peace processes, largely related to Mindanao or communist insurgents, which remain the most significant in terms of impact:

- Mindanao conflict: Although in 1996 the government reached a peace deal with the Moro National Liberation Front (MNLF), a breakaway faction called the Moro Islamic Liberation Front (MILF) continued its armed campaign. Armed conflicts between MILF and the government have driven much humanitarian need in the last 10 years, "with 750,000 people displaced by conflict in 2008 alone" (UNOCHA, 2012, p. 20). A ceasefire has been in place since October 2012, when a framework agreement was set up for the Bangsamoro region. But there is still a risk of breakaway groups, as was seen in 2012, when violence displaced a further 30,000 people (UNOCHA, 2013a). The number of lives lost in the 40-year conflict is estimated at 120,000.
- Communist Party of the Philippines/New People's Army/National Democratic Front: According to the International Crisis Group (ICG), conflict between the government and the longstanding communist insurgency has 'killed tens of thousands of combatants and civilians' since the 1960s (ICG, 2011). It remains active in the mountainous and remote areas where the New People's Army (NPA) have some de facto control and levy local 'taxes'. The humanitarian effects of NPA activities in the areas under its influence, or of the conflict between the group and the government (or affiliated forces) are not clear. However, Mindanao is again the epicentre of much of the conflict (and of recent peace negotiations).
- Rido conflicts: A further concern for Mindanao is the rido or blood-feuding between rival clans and families, often characterized by vengeance killings in areas of weak government control. The impact can be significant: according to the UN, in 2012 more than 50,000 people were displaced by these conflicts (although it reported that these were largely short-term displacements, with most needs met by government [UNOCHA, 2013, p. 21])

<sup>7</sup> Poverty rates in the Philippines are largely dependent on the methodology used. The government's own figures use a family-based poverty threshold based on an ability to purchase both food and non-food items. The Oxford Poverty and Human Development Initiative draws its results from ten indicators across three result areas. (See annex 2 for further details.)

- Sabah: The complicated territorial dispute that broke out into conflict in March 2013, shows that tension lingers in parts of the country, especially in areas that appear beyond strong government control. As of 11 April 2013 there were reportedly 7,522 evacuees from Sabah.<sup>8</sup>

The decades-long conflict has clearly contributed to vulnerability in Mindanao. The Autonomous Region in Muslim Mindanao has the poorest human development outcomes of all 16 regions in the country, with a poverty rate double that of many other areas and life expectancy more than 10 years below the national average (World Bank, 2009, p. 6).

## Background – the evolution of DRM

### Risk as an evolving priority

One of the most important aspects of risk management in the Philippines is the national commitment to progress. This can be seen in many aspects, not least in the institutional development outlined in the previous section of this report. The development of this national commitment has been gradual and incremental, but clearly the risk of disaster is a shared concern.

Consideration for disaster risk is therefore not a new priority for the country; it has evolved over time, moving from disaster response to disaster management to disaster risk management and then finally to DRR.<sup>9</sup>

Key dates and actions include:

- 1976: National Programme on Community Disaster Preparedness established.
- 1978: The above programme led to the creation of the National Disaster Coordinating Council (NDCC) as the highest policy-making body and focal point for disaster management. It established regional, provincial, municipal and barangay disaster councils, which were set up to advise local decision-makers on disaster preparedness and management.
- 2005: The NDCC Four Point Plan of Action for Preparedness<sup>10</sup> was approved, aiming to increase public awareness and involvement in measures put in place by the government to minimize the impact of future disasters.

<sup>8</sup> Internal Displacement Monitoring Centre, Regional Human Rights Commission, ARMM.

<sup>9</sup> It should be noted that throughout this process disasters continued to be a focus of debate, which sharpens views on the need for change. Key events mentioned by interviewees as pushing forward moves toward the better management of disaster risk included the Luzon earthquake of 1990, the Southern Leyte landslide of 2006 and Typhoon Ketsana in 2009.

<sup>10</sup> 1) Upgrading forecasting, 2) public information, 3) local government units (LGU) and community capacity building in vulnerable areas, 4) government and private sector partnerships for relief and rehabilitation

- 2008: A 'Preliminary Assessment on the State of DRM' was undertaken, which focused on identifying gaps and actions for DRM. It also started the process of the first national strategic plan on DRM and proposed formulation of a specific DRM act of legislation.
- 2010: In response to the above assessment and the impact of Typhoon Ketsana in 2009, the Philippines adopted the Strategic National Action Plan (SNAP) 2009-2019 for strengthening DRR. Building on the NDCC four-point plan, SNAP was the first attempt at concrete multi-stakeholder involvement, and was based on the Hyogo Framework for Action (HFA). Its aim was to build the resilience of communities to disasters and reduce disaster loss. One of SNAP's key developments was that it clearly linked DRR to poverty alleviation and development, and recommended that all stakeholders mainstream DRR.

### The Philippine Disaster Risk Reduction and Management Act 2010

This act is the latest and most comprehensive attempt to manage disaster risk, building on these decades of development, and representing, to the Philippines authorities, 'a paradigm shift connected to the country's commitment to the HFA (Philippines Government, 2010, p. 331).' At the core of the act is the transformation of the NDCC into the National Disaster Risk Reduction and Management Council (NDRRMC) with a role to not just coordinate response but for the development of a DRRM framework for the country, and through that a long-term plan for reducing risk<sup>11</sup>.

*"[The framework] shall provide for a comprehensive, all-hazards, multi-sectoral, inter-agency and community-based approach to DRR and management. The framework shall serve as the principle guide to DRR and management efforts in the country and shall be reviewed at a five-year interval."*

Finalised by the NDRRMC in June 2011 the framework strongly links disaster risk to sustainable development, and suggests that implementation is critical to the country's attempts to achieve the MDGs. It also considers the ongoing work in the Philippines to be heavily influenced by the HFA, while recognising that the act itself, however, makes no reference to the HFA's particular aims and objectives. Importantly, the framework explicitly underscores the need for operational coordination between climate change and DRRM in the Philippines. (See section below on climate change.)

The framework details implementation through four aspects of DRRM: a) preparedness (see Box 2),

<sup>11</sup> This is the National Disaster Risk Reduction and Development Plan (NDRRMP)

## Box 2. Definition of preparedness in DRRM act

“[T]he knowledge and capacities developed by governments, professional response and recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

Preparedness action is carried out within the context of disaster risk reduction and management and aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response to sustained recovery. Preparedness is based on a sound analysis of disaster risk and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities.”

b) prevention and mitigation, c) response, and d) rehabilitation and recovery. Central to this is the idea that over time, more and more emphasis will shift to prevention and mitigation<sup>12</sup>.

## Development, national security and preparedness

The evolution of risk management in the Philippines has led to a well-developed understanding and articulation of risk in key processes and plans. The Philippines Development Plan 2011-2016 (PDP) is the latest comprehensive articulation of the country’s development programming and features risk management throughout. This prominence is significant in two particular ways. First, it is seen as key to the sustainability of development, and second, it is central to ‘ensuring national security.

Often conceived as joint DRR and climate change adaptation (CCA) requirements, DRM is incorporated into the PDP as a cross-cutting issue<sup>13</sup>, and is linked to macroeconomics, the impact of disasters on growth, the economic sector, livelihoods and productive sectors, infrastructure, the environment, and social development, including the MDGs. It is in the PDP’s chapter on ‘Conservation, Protection and Rehabilitation of the Environment and Natural Resources’ that DRR/CCA are particularly relevant, where

a clear goal and objectives for risk management are presented:

*“Enhanced resilience of natural systems and improved adaptive capacities of human communities to cope with environmental hazards including climate-related risks, by (i) strengthening institutional capacities of national and local governments for climate change adaptation and disaster risk reduction and management; (ii) enhancing the resilience of natural systems; and (iii) improving adaptive capacities of communities.”* (Philippines Government, 2010, p. 331)

Preparedness itself features strongly throughout the PDP, not just within the chapter on environment and natural resources.<sup>14</sup> Examples include the following:

- The emphasis on reducing the adverse effects of flooding, combining work of many actors under the overall PDP goal of ‘accelerating infrastructure development’.
- The need for preparedness in the health sector and nutrition/food supply.
- A particular link to how to prepare for the disease and trauma caused by disasters.
- A strengthened emergency community employment programme helping ‘promote [a] paradigm shift during crisis from response to mitigation and preparedness interventions, and establish a multipurpose fund for crisis-affected workers.’ (Philippines Government, 2010, p. 264)

Recognising the year-on-year effects of both intensive and extensive natural hazards on the country, the PDP sees DRM as not just central to effective development but also to the country’s stability. The chapter of the plan that deals with ‘peace and security’ sets forth that concern, and places disaster prevention, mitigation and preparedness on a par with conflict<sup>15</sup>.

*“National security shall involve the whole-of-nation approach, focusing on internal stability, upholding the sovereignty and territorial integrity of the state, capability and preparedness against natural calamities and disasters, and reform and modernisation of the security sector.”* (Philippines Government, 2010, p. 292)

<sup>12</sup> In addition to these standalone elements of DRRM, clear efforts have been made to ground DRR in development through the creation of a DRR mainstreaming guide for development planning at a local level. This guide makes the results of disaster risk assessments and underpinning component of the planning environment. (UNDP, European Commission, National Economic and Development Authority, 2008)

<sup>13</sup> See Annex D of the NDRRMP for a detailed matrix of areas within the PDP that are directly connected to the country’s DRM strategy.

<sup>14</sup> Preparedness is certainly a priority within this articulation of risk management, as mentioned previously. It is present throughout key planning and development programmes of the government, such as the PDP and the National Framework for Physical Planning prepared from 10 years earlier, in 2000.

<sup>15</sup> As part of the single goal of creating and sustaining a ‘more secure environment conducive to national development,’ one of four objectives within national security is that the ‘highest standard of capability and preparedness against natural calamities and disasters [should be] achieved’. Activities include strengthening the preparedness of the security sector to assist with the effects of disaster. It should be noted that being ‘prepared’ within the context of national security in the PDP is also clearly linked to the ability of security actors to respond with force to armed threats.

### Box 3. Disaster risk consciousness in the Philippines

The impact of national disaster has continued to inform and motivate this shared concern. Filipino experts and authorities interviewed for this study cited a series of disasters that have driven change or proved a turning point in the prioritisation of risk:

- The 1990 Luzon earthquake that damaged 20,000 square kilometres of land, killed 1,000 people and caused damage amounting to close to US\$400 million.
- The 2006 Southern Leyte landslide that buried an entire village, killing more than 1,100 people.
- Typhoon Ketsana/Ondoy which claimed 747 lives and caused US\$4.4 billion in damage and losses in 2009.

The continual nature of disaster (not so much a single cycle but multiple cycles throughout the year) ensures that risk is rarely out of the headlines, or off the list of priorities for politicians and senior civil servants alike. These events and the country's commitment to the HFA from 2005 have continued to inform and motivate a wide cross-section of Filipino opinion, and urge continual evolution of the country's risk management.

The scale and severity of the impact of disasters have meanwhile contributed to what both national and international actors see as a largely depoliticised environment for risk management at a national level. There is a shared concern for disasters, shared political will and a shared understanding of the importance of tackling risk. This depoliticised environment for risk management coupled with a stable and continuous priority attached to disaster risk has led to legislation, frameworks and plans seen by many observers as making up one of the strongest institutional set-ups for DRM in the region.

## Implementing preparedness in the Philippines

### The plan, roles and responsibilities, and articulation of preparedness

The National Disaster Risk Reduction and Development Plan (NDRRMP) establishes roles and responsibilities for each of the four aspects of DRRM outlined in the framework, as well as objectives, outcomes and activities for each. The four responsible government agencies are as follows:

- **Prevention and Mitigation:** Department of Science and Technology (DOST) – DOST is responsible for the overall lead on reducing vulnerability and exposure (through mainstreaming, environmental management, infrastructure resilience) and enhancing the capacity of communities to reduce their own risk (community mapping and analysis, risk financing and insurance,

monitoring/forecasting/early warning).

- **Preparedness:** Department of Interior and Local Government (DILG) – DILG is responsible for raising awareness in communities, equipping communities to cope with impacts, increasing institutional capacity, and developing national and local disaster preparedness policies and plans.
- **Response:** Department of Social Welfare and Development (DSWD) – DSWD is responsible for decreasing the number of deaths/injuries, providing basic resources to affected populations, and restoring basic social services.
- **Rehabilitation and Recovery:** National Economic and Development Authority (NEDA) – NEDA is responsible for restoring livelihoods and the economy, shelter, infrastructure and public utilities, and for the physical and psychological rehabilitation of the affected.

The Office of Civil Defence (OCD), meanwhile, has the main responsibility for ensuring the implementation and monitoring of the NDRRMP. This includes ensuring all the relevant work undertaken is consistent with the plan, including those efforts that receive international support. It is also supposed to review local DRRM plans. The OCD acts as the secretariat of the NDRRMP and is responsible for overall implementation of the plan, the framework and therefore delivery under the act itself. It is also an inter-agency (both government and international community) coordinator of response, responsible for managing combined crisis-response centres nationally and at local level.

A key goal for the plan is the integration of DRRM into development and sectoral plans, while decentralising authority and resources to local authorities. This decentralisation is the main reason that preparedness as articulated by the NDRRMP largely falls under the responsibility of the DILG (with specific objectives and activities led by other agencies) that have a responsibility for ensuring local authorities have the necessary resources, capacity and guidance for fulfilling their various responsibilities. According to the NDRRMP there is one long-term goal and five key objectives under the preparedness 'theme.'

It is important to note however that the categories of emergency preparedness outlined in this study do not all fit under the role of DILG. Preparedness activities are spread across a range of key institutions. Figure 3 maps out the core preparedness activities in the Philippines among the main actors within the government risk management structure.

The implementation of risk management (including preparedness) is largely devolved to local government units, a direct outcome of the implementation of the 2010 act, which made it clear that responsibility had switched to

**Figure 2. Goals and objectives for preparedness**

Long Term Goal	Establish and strengthen capacities of communities to anticipate, cope and recover from the negative impacts of emergency occurrences and disasters				
Objectives	Increase the level of awareness of the community to the threats and impacts of all hazards, risks and vulnerabilities	Equip the community with the necessary skills to cope with the negative impacts of a disaster	Increase the capacity of institutions	Develop and implement comprehensive national and local disaster preparedness policies, plans and systems	Strengthen partnership among all key players and stakeholders

Source: taken from the NDRRMP.

**Figure 3. An analysis of where emergency preparedness activities ‘sit’ within the mandates of the five key government DRRM departments**

DOST	DILG	DSWD	NEDA	OCD
<ul style="list-style-type: none"> <li>• National hazard mapping.</li> <li>• Forecasting and Early Warning Systems</li> <li>• Assessment, monitoring, mapping, at a community level.</li> </ul>	<ul style="list-style-type: none"> <li>• Community Awareness</li> <li>• Community preparedness: response preparedness, decision-making, etc.</li> <li>• National and local preparedness policies and plans</li> <li>• Preparedness capacity of local DRR councils and operation centres.</li> </ul>	<ul style="list-style-type: none"> <li>• Response coordination at national and local levels</li> <li>• Response planning</li> <li>• Disaster Response Operation Preparation.</li> <li>• Information Management,</li> <li>• Prepositioning</li> </ul>	<ul style="list-style-type: none"> <li>• Preparedness for recovery</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional frameworks</li> <li>• National plan of action</li> <li>• International agreements</li> <li>• Early Warning Dissemination</li> <li>• Implementing DILG community preparedness</li> </ul>

devolved authorities.<sup>16</sup> The NDRRMP makes it clear that ‘at the frontlines of preparedness are the local government units, local chief executives and communities (Philippines Government, 2011, p. 7)’. A list of local government ‘responsibilities’ includes many elements of preparedness, including risk assessments, contingency planning, vulnerability mapping, information management, public awareness and the creation of preparedness/response networks<sup>17</sup>.

Local governance is somewhat complicated in the Philippines (see Box 4) but it could be safely said that the bulk of the work of preparedness is done within cities, municipalities, or *barangays* (the smallest of the local government units [LGUs]). The regional and provincial

authorities are largely only responsible for ‘coordination and supervision.’<sup>18</sup>

There are no representatives of the five main national DRM-responsible agencies at local implementation level. Instead, local bodies handle this work. Local councils similar in form and function to the NDRRMC undertake coordination. What is significantly different is that a locally elected ‘chief executive’ rather than a senior civil servant heads these as well as the local disaster risk reduction and management (LDRRMC) offices. Under the act, the LDRRMCs are responsible for overseeing the mainstreaming of DRM issues into local plans and priorities (such as local development and land use plans) and, importantly, budgeting. The LDRRMCs undertake specific DRRM planning and activities. But before this occurs, local DRRM offices need to develop the local equivalent of the national DRRM plan for their respective area.

<sup>16</sup> This in itself has its roots in the Philippines constitution and its focus on local autonomy as well as the 1991 Local Government Code that stated that local government units had a responsibility to respond to disaster needs.

<sup>17</sup> See the section on ‘disaster preparedness’ within the NDRRMP for full details of local level responsibilities.

<sup>18</sup> The devolved Autonomous Region in Muslim Mindanao (ARRM) is the exception, as noted earlier.

#### Box 4. Local government units (LGUs) in the Philippines

**Region** – A sub-national administrative unit comprising several provinces with more or less homogenous characteristics, such as ethnic origin of inhabitants, dialect spoken, agricultural produce.

**Province** – The largest unit in the political structure. It consists of municipalities and, in some cases, component cities. Its functions and duties in relation to its component cities and municipalities are generally coordinative and supervisory.

**City** – There are three classes of cities: highly urbanised; component cities which are independent of the province; and component cities which are part of the provinces and subject to their administrative supervision.

**Municipality** – A political corporate body endowed with the facilities of a municipal corporation, exercised by and through the municipal government in conformity with law. It is a subsidiary of the province, which consists of a number of *barangays* within its territorial boundaries, one of which is the seat of government found at the town proper (*poblacion*).

**Barangay** – The smallest political unit into which cities and municipalities are divided. It is the basic unit of the political system. It consists of fewer than 1,000 inhabitants residing within the territorial limit of a city or municipality and administered by a set of elective officials, headed by a *barangay* chairman.

### The current status of preparedness

It is not an easy task to assess just how well the Philippines is prepared, especially given the changing face of risk in the country. Although we have a reasonably clear understanding of how many people are at-risk from various hazards, even those that are man-made, there exists no detailed projection of what are the full emergency preparedness needs, or of and therefore the gaps between those needs and current activities.

Much of what is said and written about the country's risk management is quite positive. Indeed many of those interviewed for this study with experience in other countries said they had rarely worked in such a well-developed risk management culture and such a clearly 'risk-aware' environment as the Philippines.

The NDRRMP says that preparedness activities had been undertaken well before the 2010 act, and lists a series of accomplishments before the creation of the plan itself, many of which would classify as emergency preparedness for the benefit of this study (Philippines Government, 2011b, p. 40):

- Conduct of DRRM research.
- Conduct of multi-stakeholder dialogues.
- Conduct of various capacity-building activities.
- Development and regular review of contingency plans.
- Development of information, education and communication (IEC) materials.
- Development of information and database generation.
- Inclusion of DRRM in school curricula (especially in basic education).
- Existence of procedures on disaster communication.

The foundation of the good work currently underway in preparedness consists of the strong legislation, framework and plan, and the institutional set-up at a national level, backed up by the depoliticised nature of discussion on risk and risk management.

### National preparedness

In many inter-related technical areas the government is very strong. The work of PAGASA (the Philippine Atmospheric Geophysical and Astronomical Services Administration) in weather forecasting, of PHIVOLCS (Philippine Institute of Volcanology and Seismology) in mapping and monitoring the risk of earthquakes and volcanoes, and of the Mines and Geosciences Bureau (MGB) in mapping the risk of flooding and landslides has been highly recommended, and continue to improve in technical expertise and reliability. There is a strong understanding of risk and early warning at a national level.

The scale of the work being undertaken is also significant. The largest single investment in preparedness is by far that of DILG and its river basin programme. Through this the government is rolling out preparedness plans for LGUs across 18 river basins, working with more than 500 municipalities across 40 provinces. This includes community risk-mapping and local contingency planning down to *barangay* level, training for search and rescue, incident command centres and the provision of early warning and search and rescue equipment. (It also incorporates training on both CCA and DRM.)

Preparedness for response is also improving in speed, efficiency and effectiveness. Many actors have reported how the government's preparedness to deal with disasters has improved significantly between Typhoon Ketsana in 2009 and more recent disasters (in particular those that have occurred in areas traditionally highly exposed).

Training, equipment, planning and financial provision have all contributed to an improved response.

Despite these many positive aspects of the implementation of emergency preparedness, reviews of key reports and assessments and discussions with stakeholders revealed areas that do need to be addressed:

- Lack of knowledge of essential aspects of risk management: Government is not completely aware of the work underway in preparedness or related areas in risk-management; in addition more is required to understand the full scale and scope of needs.
- Coordination of preparedness is mixed: Several areas needing improving, for example:
  - Among technical agencies involved in understanding risk, improved compatibility of the work done is required, especially through understanding and coordination on multiple risks. There are also reports of disconnects between technical agencies and OCD, leading to key early warnings not being as effective as they should be.
  - Coordination between the central DRM institutions and the sector departments is sometimes problematic, despite the cluster system and joint work under the NDRRMC. It is not clear where responsibility for coordination starts and where it stops.
  - Burdens are considerable and cumulative. For example the agencies that are part of both national and regional DRRMCs have to balance their responsibilities under the DRRM act whilst also continuing to deliver on the rest of their sectoral obligations.
  - Civil-military coordination could be strengthened considering that the military is involved in responding to large-scale disasters in the country. (UNOCHA, 2013b, p. 30)
- Communication is uneven: While the work on early warning and risk analysis is good, there is an inability to consistently translate this into messages that can be both understood and used by a range of relevant stakeholders, whether decision-makers or communities. Examples include people living in no-build-zones in Illigan and Cagayan de Oro were told their homes were located in high-risk zones, prior to Tropical Storm Washi in 2011 (IDMC, 2013, p. 26). Hazard maps have in the past been distributed without explanation. Early warning messages are not always couched in language that is easily understood, a problem that was highlighted when many residents of Mindanao reported that they believed a category 3 typhoon was weaker than a category 1.
- Logistics, resources and equipment are lacking: There are gaps in a range of hard assets for preparedness, including search and rescue equipment and warehouse space.
- The transfer of technical knowledge to local areas remains weak.

- Accountability is in question: There are doubts about accountability in its work in preparedness, an issue recounted by both government and non-government representatives during interviews. For example, surveyed victims of Tropical Storm Washi felt that few in government were accountable for inadequate or negligent preparedness (IDMC, 2013).
- Lack of Implementation: Reports from several of the most recent major disasters suggest that some of the key preparedness initiatives were simply not carried out, despite the act and the pressure on LGUs to deliver.

### Local preparedness

Local levels of preparedness vary across the Philippines. There is no direct correlation between the levels of risk and the levels of needed investment in preparedness issues, however. There are communities, provinces and regions that face regular multiple hazards every year and others that are rarely affected. Some of the areas that have been repeatedly hit by typhoons and flooding are remarkably resilient, do their own profiling of vulnerability, risk-mapping, and planning of evacuation routes, and are even exporting their knowledge and skills to other parts of the country, and internationally. Other areas, such as Eastern Mindanao, have been suddenly hit with a string of disasters decades after the last such events, and were simply not prepared.

National government authorities and other stakeholders interviewed were most concerned about uneven levels of preparedness across the country. Key observations are as follows:

- There is a considerable burden on LGUs. On the one hand they have to translate the work of five different line agencies into operations at a local level. On the other hand they not only have a DRM plan to put in place, but also one for climate change, the latter currently without funding. (See section on financing in this paper for more.)
- There are bureaucratic issues that affect capacity, such as human resource caps that do not take into account the legislative and operational need to set up a local DRRM office.
- Local level politics affect risk more than national. Directly elected chief executive officers, rather than civil servants, head LGUs, up to three terms of three years each. Local politics was cited in interviews (as well as the 2011 HFA monitoring report) as an issue that is affecting the quality of local risk management.
- Hazards naturally cross local boundaries; insufficient coordination among LGUs or with the provincial level was reported in terms of ensuring that all risk management, including preparedness, was managed beyond boundaries.

### Box 5. The seal of disaster preparedness

One initiative that supports the development of adequate preparedness is the DILG's 'seal of disaster preparedness in local governments,' which has the objective to benchmark on preparedness standards, assess performance gaps to be addressed, and incentivise both best practice and delivery under the act (in part, it is hoped, through additional financing being made available). This, it is hoped, will drive improvement in preparedness. (For more details see DILG, 2013.) LGUs are assessed under four criteria:

- Leadership structure: Compliance with the Philippine DRRM Act of 2010, in creating both a local DRRM council and office, 'created and functional pursuant to the policy standards prescribed by law.'
- Guide to action: The preparation and communication of a Calamity Contingency Plan.
- Operational readiness: Minimum tests of readiness immediately before a calamity, including: Regularly tested early warning systems
  - A fully disseminated family guide to action on warning.
  - Emergency drills.
  - Designated evacuation centres.
  - Pre-deployed or location-specific assigned rescue equipment and transport.
  - Organized and trained personnel: evacuation, search and rescue, medical and counselling, relief distribution.
- Innovative practices: Sharing cultural, community and indigenous knowledge.

- It is often the poorest areas that have the least capacity, facing a challenging combination of limited local resources to tackle risk and a basket of chronic needs, often exacerbated by continuous disasters.
 

*"Line agencies and LGUs often lack the capacity to assume the DRM functions assigned to them. Key issues include duplication of efforts in providing hazard and risk information to LGUs, lack of disaggregated data on historical disaster damage and losses, and lack of capacity to conduct vulnerability and risk assessments."* (ADB, 2010)

One of the latest major reviews of preparedness at a local level was drawn up for the 2011 HFA report, and found that 60% of municipalities and 34% of cities were unprepared – a figure that was fairly optimistic, to judge by recent disasters.<sup>19</sup>

<sup>19</sup> DILG, through its analysis of LGUs as part of its 'Seal of Disaster Preparedness' may be able to provide a more detailed and recent audit.

### Preparedness by sector

The 2010 act makes it clear that DRR is a multi-sector issue<sup>20</sup>, and requires authorities to:

*"Mainstream DRR and climate change in development processes such as policy formulation, socioeconomic development planning, budgeting, and governance, particularly in the areas of environment, agriculture, water, energy, health, education, poverty reduction, land-use and urban planning, and public infrastructure and housing."*<sup>21</sup>

The NDRRMP takes forward this requirement and makes initial connections within the four priority areas of the country's DRM framework:

- Under 'prevention and mitigation' it has one outcome on DRRM/CCA mainstreaming in sector policies, plans and budgets, and another that requires risk assessments to be prepared for 'key sectors'.
- Under 'preparedness' there is no specific cross-reference to sector preparedness.
- Under 'response' there are, as could be expected, references to shelter and health provision, and in particular to those sectors being prepared to deliver timely and effective support.
- Under 'rehabilitation and recovery' the cross-references with sectors are obvious and many, including in livelihoods, shelter and public services.

However, it is in the annex on the relationship between the NDRRMP and the PDP that the explicit demands required of sectoral agencies become clear. Here are a set of DRR/CCA strategies set out across the range of PDP areas, including industry and services, agriculture and fisheries, infrastructure, social development, and peace and security.

Several of these 'strategies' reference preparedness (Philippines Government, 2010):

- Industry and services: "Assess the level of DRR awareness and activities among the private sector and disseminate IEC materials on DRR to ensure their support, participation and cooperation."
- Agriculture and fisheries: "Strengthen the capacity of communities to respond effectively to climate risks and natural hazards."
- Infrastructure: "Assess the vulnerability of energy facilities to climate change and natural disasters."
- Social development: "Introduce DRR and CCA in school curricula, alongside the promotion of green technology in constructing houses and social

<sup>20</sup> It should be noted that mainstreaming also works the other way around, with health, human-induced disasters, gender mainstreaming, environmental protection and culture cutting across the four DRRM priority areas.

<sup>21</sup> DRRM act: 'An Act Strengthening The Philippine Disaster Risk Reduction And Management System, Providing For The National Disaster Risk Reduction And Management Framework And Institutionalising The National Disaster Risk Reduction And Management Plan.'

infrastructure and social safety nets for vulnerable groups, like farmers.”

It has not been possible within the limitations of this study to analyse the effectiveness of these demands placed on all sectoral agencies and departments. However, comments from those interviewed and a review of the most recent analysis of the government’s crisis readiness suggests a mixed picture. There is evidence that disaster risk is an essential part of many key departments; apart from anything the quasi-permanent nature of clusters, which are led by sectoral departments, has helped instil readiness across front-line agencies.<sup>22</sup> However, only the health and education departments’ (beyond the five DRM mandated agencies) lead clusters actually have this responsibility. This may be part of the reason why some departments such as health seem to be highly prepared for crises while others such as agriculture are not. Regarding the latter department, despite the millions of dollars in direct damage and related loss suffered in agriculture (and related livelihoods) each year, preparedness does not appear to be a priority.

The Department of Health (DoH) is one of the most cited departments due to its relatively recent embrace of risk, which has come with a marked increase in dedicated response programmes and capacity over a fairly short period of time. Formed out of a single programme in 2000, Health Emergency Management (a component of the DoH) now has a budget of close to US\$4 million, with a proposed increase to US\$6.1 million in 2014 and a proposal to provide the unit with specialised equipment to the value of US\$29.1 million.

### Climate change adaptation

The Philippines places a great deal of importance on climate issues. This emphasis goes all the way up to the top levels of government with “Integrity of the environment and climate change adaptation and mitigation” being one of the current president’s five key result areas<sup>23</sup> in his ‘social contract’ with the Filipino people.

The country also has a long history of engagement in climate issues. It created an inter-agency committee on climate change in the early 1990s, whose responsibility was to coordinate climate change activities and prepare the country’s position with regard to the UN Framework Convention on Climate Change (UNFCCC) negotiations. The Climate Change Act of 2009 has been a step forward, creating a Climate Change Commission (CCC) mandated to formulate the country’s strategy, programme and action plan.

<sup>22</sup> Sectoral departments leading clusters are DepEd (education) and the  
<sup>23</sup> The other four areas are: 1) transparent, accountable, and participatory governance; 2) poverty reduction and empowerment of the poor and vulnerable; 3) rapid, inclusive, and sustained economic growth; 4) just and lasting peace and the rule of law.

### Box 6. The ten P’s of emergency preparedness: Philippines Department of Health

In addition to this growth in preparedness capacity, the DoH’s Health Emergency Management unit has also developed specific preparedness activities for health sector, called the ‘Ten P’s of emergency preparedness’:

- Policy Formulation and Development
- Plan Development
- People
- Partnership Building
- Programme Development
- Physical Infrastructure Development
- Practices
- Peso and Logistics
- Promotion and Advocacy
- Package of Services

Both this legislation and the subsequent DRRM act of 2010 make explicit reference to climate risks and climate-related disasters. This makes considerable sense given that “90% of the damages caused by extreme natural events [in the Philippines] are climate-sensitive” (Philippines Government, 2011). The NDRRM framework makes continual references to DRR and CCA combined, and the need for them to be jointly mainstreamed. The plan takes this a step forward and ‘operationalizes’ some of the key connections. This includes climate-sensitive environmental management and the development of a joint DRR/CCA workplan.

The National Climate Change Action Plan (NCCAP) outlines the agenda for CCA and adaptation from 2011 to 2038. It has seven strategic objectives, two of which, ecosystem and environmental stability and human security, directly connect with DRM, and with the PDP. The latter in particular articulates key issues around disaster risk, with preparedness activities also identified, including risk assessments, training of health and community workers, support for response coordination and awareness raising. The Climate Change Commission is mandated to coordinate with the NDRRMC and is represented on council while the chair of the NDRRMC (the secretary of the Department of National Defence, OCD’s parent department) is a member of the CCC advisory board. In 2011 a memorandum of understanding between the NDRRMC and the CCC was developed to harmonize efforts, especially locally.

Despite the obvious goodwill and desire to progress there are some issues to address:

- Local integration: Much of the work on risk, the processes, procedures, and corresponding budgets, has been developed through the DRRM act. CCA has little traction locally beyond a narrow range of already funded programmes (largely externally funded) and

knowledge of climate risks (and possible changes) is at best mixed.

- National coordination: There is still a divide between the work on climate and disaster, with climate issues worked on by the commission in collaboration with the Department of Environment and Natural Resources, and the work of disaster managed by the NDRRMC and the five key institutions.

### Summary: core government preparedness issues to address

These issues of implementation, involving both national and local roles and responsibilities<sup>24</sup>, have their foundation in a series of inter-related issues:

- Focus of government response: According to many actors interviewed (both government and other stakeholders), although the DRRM act has been passed, a framework drawn up and a plan developed, authorities are still largely driven by response, and are reactive. Greater incentives are needed at all levels to ensure prevention and preparedness, rather than response and recovery, become the norm.
- Policing implementation: Many of the criticisms of government preparedness for typhoons focus on the seeming lack of implementation of the act's clear instructions and obligations. These include hazard maps not being interpreted; contingency plans not being developed or not disseminated; and a lack of early warning. There are related questions being asked about the central authorities' ability to police implementation of the act (and about what sanctions they have available to address negligence and other issues.)
- Implementation by national government and LGUs: The government clearly faces a challenge in coordinating all the provisions of the act, vertical and horizontal, national and local, and especially the many layers of responsibility from *barangay* captains to senior civil servants within the NDRRMC.
- Preparedness mandates: Although preparedness has been broadly marked as an issue of responsibility for DILG, emergency preparedness stretches across many of the agencies responsible for DRM in the country. This is not just an issue of semantics but also of boundary clarity. While DILG is responsible for local government preparedness capacity, DSWD is responsible for what we might call 'preparedness for response' and OCD for 'coordination preparedness' across

agencies and issues. What this means in practice is not as yet clear<sup>25</sup>, and reportedly local authorities are not always sure who to turn to for the various preparedness activities.

- Lack of information in knowledge management: Not enough space is given within the DRM framework and plan to the role of knowledge management. This has in part led to a lack of knowledge on key issues such as the needs across a range of DRM areas, and the full range of interventions underway. This is aggravated by apparent weaknesses in the tracking of international investments within government accounting, with NEDA not obliged by legislation to track international projects below the value of US\$12.5 million.
- Fragmentation of funding channels: An incomplete picture of needs and of all current activities is accentuated by the fact that elements of government down to LGU level can approach donors bilaterally for funding.

This said, we should remember that the DRRM act itself was only signed in 2010 and the institutions only granted their clear roles and responsibilities the following year. Although much of what they are doing in DRM was already underway, guided by other legislation, this act was the first attempt at unified, coherent, multi-stakeholder risk management.

### Civil society, private sector and risk management

Civil society awareness of disaster risk issues is high, knowledge of these issues is widespread, and engagement with key processes increases year on year. The media focuses on disaster issues, university courses develop the capacity of disaster risk managers, and the private sector's attention to risk is growing. Disaster platforms exist both nationally and in many cases locally, with civil society heavily involved. The new law of 2010 was not the only chance for civil society to influence the country's disaster risk agenda, but it was the first possibility for sustained stakeholder engagement, with the act being drafted over a two-year consultation period. This process has helped ensure that disaster risk remains a key part of social consciousness and debate.

Civil society in the Philippines is involved in funding, implementing and monitoring preparedness activities, as well as wide-ranging work on research, networking and advocacy. In terms of funding for preparedness the most optimistic area for growth is likely to be the Philippines private sector, which already funds programmes in the country<sup>26</sup>. It has also even started to reach out

<sup>24</sup> The IDMC report of 2013 is probably the most critical of the recent reports into risk management in the Philippines. Focusing on response to Tropical Storm Washi in particular it suggests that local DRRMMPs were not comprehensively developed, with little evidence that they were published or implemented prior to the typhoon. In addition flood early warning at local levels is weak, despite the evident need. Early warning did not translate into clear messages, in some cases; some communities received no messages. Meanwhile, some local authorities, according to the report, ignored flood risk warnings completely, leading to many more people being affected than would otherwise be the case.

<sup>25</sup> A similar issue of mandate clash is between OCD and NEDA, where the latter is responsible for recovery and rehabilitation and the former is responsible for 'early recovery'.

<sup>26</sup> See the funding section of the report for more details.

internationally, with SM Prime Holdings, the largest Philippine shopping chain, having joined the private sector advisory group of the United Nations International Strategy for Disaster Reduction (UNISDR).

The private sector has contributed considerably to response activities and is increasing its work on preparedness. Some of this is through membership groups such as the Philippines Business for Social Progress. The PBSP is the country's largest business-led social development organisation. It works with its 243 member companies to integrate corporate social responsibility (CSR) into their core work, and examines the impact of business on the country's growth. It also has a philanthropic wing; in 2012 it reported giving support of one kind or another to more than 14 million people, from its members and other sources. Its work on preparedness comes as part of a shared DRR/CCA agenda. The Corporate Network for Disaster Response meanwhile targets disasters in particular. Again, sponsored by a mix of both member and external contributions it works from disaster response to preparedness, with a particular focus on the most vulnerable areas.

One of the most promising public-private sector partnerships for emergency preparedness (and indeed for a wide range of risk-related activities) is the Philippine Disaster Recovery Foundation. Set up after the 2009 typhoon season, the PDRF is venturing beyond reconstruction into ex-ante initiatives, such as using mobile phone company installations to install rain gauges for monitoring by PAGASA.

### Regional aspects on preparedness

Perhaps one of the more surprising study findings was the rather limited regional interconnection on preparedness issues. While international actors are considerably 'regional' in their work, with policy and strategy hubs, and logistics bases, in Thailand or in Indonesia, there is less focus on regional issues than in other countries in the area.

For example the country is a member of the Association of Southeast Asian Nations (ASEAN) and is a party to AADMER, the ASEAN Agreement on Disaster Management and Emergency Response, which legally binds the member states on regional cooperation and collaboration in reducing disaster losses and working on emergency response. However this work to date has had little relevance to Philippines preparedness itself.

Filipino officials have explained this as being largely due to the geographical distance from partners within the ASEAN region. As an archipelago country, it shares few risks with other countries; cooperation is therefore less essential at the practical level of preparedness.

### Box 7.

#### Civil society and disaster preparedness

One of the most influential actors is the **Philippines National Red Cross (PNRC)**. The PNRC is heavily involved in a range of DRR and preparedness activities, both in the capital and throughout all the regions. Its 2012-2016 strategic plan has four goals, the first of which is "significantly reducing the impact of disasters, climate change, public health emergencies and illnesses on the most affected families and communities." The PNRC reports that all six of the national RC teams also operate through this strategic plan.

The **Centre for Disaster Preparedness (CDP)** is a different kind of civil society contributor to disaster preparedness: The CDP is a resource centre that focuses on capacity-building for DRM. It works on community preparedness, but its focus appears to be very strong in areas of training, research and publication, with a lot of supporting work in advocacy and networking.

The **Ateneo University of Manila** has a dedicated DRR and CCA programme as part of its School of Government. The programme conducts training courses and capacity-building workshops in communities in partnership with local government units and civil society organisations. It is frequently a partner of international organisations. It was recently named the representative for the academic/research institution seat of the National Disaster Risk Reduction and Management Council (NDRRMC.)

### Preparedness for conflict

Disaster and conflict risks of all kind are not necessarily managed in an integrated fashion in the Philippines (and therefore are neither prepared for in an integrated fashion) whether by national or international actors, a situation that is likely not inappropriate given the distribution of risk. As noted in the introductory section, conflict risk is now largely limited to southern areas of the Philippines, and rarely extends beyond the Mindanao region. The rest of the country is almost all free of the effects of significant conflict, allowing the focus to be towards tackling disaster risk.

#### Conflict policy, institutions and programmes

The National Security Policy provides the overarching framework for the Philippines' peace and security, and is based on four elements: governance, basic services, economic reconstruction and sustainable development, and security sector reforms. The policy has the following four strategies:

1. To win the hearts and minds of those with valid grievances and retain the allegiance of the rest.

2. To strengthen the integrity of national institutions and promote good governance.
3. To promote the peace process as the centrepiece of our internal security programme.
4. To launch a proactive and holistic programme to combat terrorism.

The office of the Presidential Adviser on the Peace Process (OPAPP) is mandated to oversee, coordinate and integrate the implementation of the 'comprehensive peace process', which in fact is rather a series of processes involving various armed groups, the most significant of which grew out of conflict in Muslim areas of Western Mindanao. According to OPAPP its work is anchored on the Benigno Aquino administration's National Security Policy, with the ultimate goal being "a negotiated political settlement of all armed conflicts". It sees its role as delivering those same four elements to achieve peace: governance, delivery of basic services, economic reconstruction and sustainable development, and security sector reform.

The Payapa at Masaganang Pamayanan (PAMANA) is the government programme and framework for peace and development. Essentially PAMANA is responsible for delivering the development part of OPAPP's mandate in areas previously affected by conflict but now covered by a peace agreement. At present that largely accounts for all conflict-affected areas of the country.

*"A complementary track to peace negotiations, the Programme's main strategy is to bring back government to PAMANA Areas, ensuring that the communities benefit from improved delivery of basic social services and are served by responsive, transparent and accountable government units."*

Emergency preparedness largely devolves to the same actors and the same structures that are responsible for preparing for disasters<sup>27</sup> under the 2010 act including OCD, DILG and DSWD. Local government units are once more involved, with the regional DRR. And the management council for Mindanao has been considerably involved in coordination and preparedness, including contingency planning for conflict. The Humanitarian Action Plan for Mindanao states that "the government has remained committed to being the first responder in the event of any calamity, either natural or man-made" (UNOCHA, 2013a, p. 45). This strongly suggests that government is heavily involved in preparedness for response. However, the Western part of the island is a separate and largely devolved regional authority (the ARMM or Autonomous Region in Muslim Mindanao) – a vestige of previous peace negotiations. The devolved

responsibility includes areas of health, social welfare and policing. The regional authorities are thus also heavily involved in the preparedness and coordination of relief efforts. The LGUs in conflict-affected areas are still obliged to implement the local aspects of the 2010 act. In summary, the institutional context for preparedness for conflict in the Philippines is largely an extension of

### Box 8. Coordination for risk management

**NDRRMC:** The NDRRMC is charged with overall coordination of the work under the 2010 DRRM act with the Office of Civil Defence responsible for the implementation of that coordination. The council features a range of actors beyond the prime five responsible for delivering on the act, including the CCC and a range of key government sectoral departments.

**Humanitarian coordination:** Overall responsibility for coordinating humanitarian action lies with OCD, with support from UNOCHA. This work is reported both to the NDRRMC for national purposes and to the humanitarian country team lead by the UNRCHC for linkages to the international community.

In the Philippines a semi-permanent cluster system has been set up at national level, mirrored regionally when disaster strikes. The national cluster system has 13 main clusters and 3 sub-clusters. All the clusters in the Philippines are co-led by a government agency and a UN counterpart. The clusters most relevant to preparedness are those for coordination and early recovery.

The Humanitarian Country Team includes all the resident UN agencies, donor agencies and seven representatives from the NGO community. The IFRC and ICRC have observer status.

**Development coordination:** The Philippines Development Forum (PDF) is the primary policy dialogue mechanism between the government and development partners. The PDF is chaired by the World Bank and Department of Finance. It does not meet regularly however, usually only once a year.

Ten thematic groups meet more regularly, however. The one that references risk management most frequently is that of climate change, convened by the CCC and UNDP.

**INGO Coordination:** PINGON (Philippine International Non-Governmental Organisation Network) is the Philippines INGO coordination body composed of a wide range of 21 international groups and organisations with a particular focus on humanitarian response and disaster risk reduction. It is designed as a forum for exchanging ideas, collaboration, resource-sharing, and agreement on minimum standards.

<sup>27</sup> The key exception here is the armed forces, which is often involved in response activities, and in preparing for response. See box below for details.

the disaster risk management responsibilities under the DRRM act of 2010. There is not a great deal within the act itself on this issue beyond recognising the interface between the two areas and the need to work on conflict and disaster issues at the same time in the same place:

*“Mainstream disaster risk reduction into the peace process and conflict resolution approaches in order to minimise loss of lives and damage to property, and ensure that communities in conflict zones can immediately go back to their normal lives during periods of intermittent conflicts.”<sup>28</sup>*

The NDDRMP takes this further by stating that the inclusion of conflict into DRRM activities under the act will take place and through this, “losses in lives and damages to properties will be minimised and communities in hazards and conflict zones can immediately go back to their normal lives after.”

### The complexity of preparedness in conflict-affected areas

This said, it is in conflict zones that issues of government provision of preparedness face the greatest challenges. This is partly a consequence of the government of the Philippines being a party to the conflict itself (except for in *rido* blood-feuding). Several of those interviewed expressed reservations about government agencies working in conflict-affected areas with this concern particularly reserved for the Office of Civil Defence and its coordination responsibility. The OCD is a civilian arm of the Department of Defence and therefore an even closer party to the conflict than other departments. This could potentially impact on decision-making, prioritisation, etc. It is pertinent to record that while none of those questioned for this study could think of different activities for preparing for conflict compared to preparing for disasters, several did say it is important that a neutral actor should undertake such activities with conflict-affected populations.

The lack of specific legal guidelines for preparedness for conflict-related issues is of some concern. As mentioned, the delivery of emergency preparedness is not defined in legislation that is as clear as the DRRM act for disasters. There is no similarly constructed framework or plan that articulates the role of preparedness in managing the risk of conflict. The actual peace frameworks themselves say almost nothing on the question of what to do with populations that may be affected by recurring conflict. It is not unfeasible that this lack of specific government guidelines could on the one hand burden departments with obligations they do not have the resources to manage, and perhaps, more importantly, actually

undermine peace if motives are not clear and those conflicts of interest are perceived as driving decisions. This would be compounded by the lack of clarity on who leads what part of risk management, and how.

This suggests an even more considerable responsibility would fall onto the devolved ARMM government. Whether or not it is able to deliver on this responsibility is questionable; according to several sources it is the failure of ARMM to deliver on the development and governance aspects of its mandate that has in part led to the decision to create a new ‘Bangsamoro’ authority as part of the latest peace deal.

This said, there were no observations made during the study interviews or in supporting literature indicating that the authorities (and supporting actors) were not prepared for conflict issues in Mindanao. The International Committee of the Red Cross (ICRC) consider that on the whole most risks are known and planned for, key actors are trained appropriately and resources are set aside.

One of the most interesting (and laudable) aspects of preparedness in Mindanao is the flexibility of actors. On the one hand all of the key government departments responsible for DRM delivery stated that they continued to extend their work in preparedness to those communities affected by conflict (although there is a somewhat grey area of roles and responsibility). Similarly the ICRC itself, when Typhoon Bopha struck Mindanao, was able to immediately release stocks and deploy staff to relief operations, even though these resources were actually meant for conflict response.

## The international system and emergency preparedness

### The international system and risk management

Ex-ante risk management in the Philippines is clearly of significant importance to the international community. There are strategies, programmes and projects across a range of inter-related issues, and from a range of perspectives, mirroring the diversity of the actors present, from those primarily involved in humanitarian response to those looking at long-term development<sup>29</sup> The frameworks that guide the international community’s engagement with the Philippines are replete with references and cross-references to risk, especially disaster risk; this includes both long-term development frameworks and short-term humanitarian appeals.

<sup>28</sup> Section 1i of the Republic Act No. 10121

<sup>29</sup> See Annex 7 for full list of international community stakeholders.

## United Nations Development Assistance Framework

The United Nations Development Assistance Framework (UNDAF) in the Philippines (2012–2018) (United Nations, 2012). is aligned with the Philippines Development Plan and is articulated around delivery against the MDGs. There are also specifically strong links between the environment and people's dependence on it, and how disaster risk undermines people's lives and livelihoods.

One of the four outcome areas for the UNDAF is 'resilience to disaster and climate change,' with an objective to 'ensure community livelihood resilience by supporting the incorporation of disaster risk reduction and management, climate change adaptation, and environment/natural resources (ENR) conservation measures into community, sectoral and national plans.'

Under DRRM the UN will support the:

- integration of DRRM into national and local policies, plans and programmes;
- implementation of priority DRRM mitigation and preparedness actions at the national and local levels, such as capacity-building, small-scale infrastructure, and the development of tools and frameworks; and
- development of DRRM knowledge-management systems; and the strengthening of national and local capacities.

The UNDAF also links disaster risk and climate, with plans to work with the CCC on adaptation issues down to a community level. There is not a great deal of conflict/disaster integration within the UNDAF, although under DRRM activities there is a sub-outcome for 'conflict prevention and peace-building'. Importantly, however, the priority areas for the UNDAF are those which are most disaster-prone/climate-affected, and those that face conflict.

## Humanitarian action plans

Recognising the continual level of risks within the country, the humanitarian action plans developed by the UN Office for the Coordination of Humanitarian Affairs (UN OCHA) together with partners within the humanitarian country team (HCT) and government, consider risk management a high priority. These range from ex-ante investments in preparedness involving effective response to long-term interventions to support government capacity to manage risk itself.

*Humanitarian Action Plan 2013:* The action plan for Mindanao is recognised as 'a continuing process towards the humanitarian community contributing to government-led preparedness and long-term solutions (UNOCHA, 2013a, p. 7).' References are made to the

operationalisation of the 2010 act and to supporting government development of those activities. 'Promoting Emergency Preparedness' is one of the plan's nine strategic objectives, with work to support contingency planning by government, community early warning, community mobilisation and capacity building seen as key activities. Preparedness is seen by both the coordination and early recovery clusters as one of several objectives to be sought for funding.

*Typhoon Bopha/Pablo Action Plan for Recovery – Revision:* The revised action plan for Typhoon Bopha, locally known as Pablo, is similar to the Mindanao 2013 HAP, making a particular reference to the need for humanitarian response to "be conducted in a manner which builds government capacity for DRRM and emergency response" (UNOCHA, 2013b, p. 42). Once again, preparedness is seen as a strategic issue for the plan, which states that "humanitarian efforts must encompass community resilience, preparedness and response" (UNOCHA, 2013b, p. 43). The coordination cluster also accounts for the bulk of preparedness activities within the plan, focusing on emergency preparedness and planning. However there is also a much clearer articulation of emergency preparedness as a cross-sector issue linked to building government capacity: training of water, sanitation and hygiene (WASH) focal points in LGUs, training for camp managers, training for health and nutrition workers in post-crisis requirements, etc.

## The development bank strategies

The World Bank recognises the importance of disasters within its latest available country-assistance strategy by considering disaster risk by a particular linkage to climate as one of the particularly important emerging global challenges relevant to the country. One of the four strategic areas is the reduction of vulnerability, and within this one of three results areas and outcomes is DRM and climate change. One of the two outcomes is "disaster and climate-change-related risks reduced" (World Bank, 2009, p. 24). Within this there is a specific outcome for "strengthening preparedness and adaptation at local level with a focus on improving planning and capacity, knowledge and understanding of measures to reduce disaster risk" (The World Bank, 2009, p. 25).

The Asian Development Bank, in its 2011-2016 strategy places 'environment, and vulnerability to climate change and disasters' as one of six key points under its assessment of the country's economics. The key objective of ADB support is to 'help the Philippines achieve high, inclusive and sustainable growth' (ADB, 2010). The strategy calls for it to support disaster-risk financing and to mainstream DRM and CCA into the rest of the ADB's investment projects.

### Examples of donor assistance frameworks<sup>30</sup>

Japan focuses on three priority pillars of development assistance to the Philippines: sustainable growth, poverty reduction, peace and stability in Mindanao. Environmental protection and disaster prevention are one of the three sub-components of the poverty reduction pillar. Within this there are two major projects: for flood forecasting and early warning for river basins, and for flood disaster mitigation on Camguin.

Australia has six strategic goals for its development expenditure in the Philippines: humanitarian and disaster response, effective governance, sustainable economic development, promoting opportunities, saving lives and cross-cutting. Within the 'humanitarian response' goal preparedness activities include risk analyses for natural hazards and community risk management. Two long-term projects which include significant disaster preparedness activities are:

- Building the Resilience and Awareness of Metro Manila Communities to Natural Disaster; and
- Climate Change Impacts and Philippines Disaster and Climate Risks Management.

The United States Agency for International Development (USAID) is currently drafting its development strategy for the country up to 2016. It is likely to include DRR as a development objective, 'increasing resilience by reducing disaster risk'. In its previous work in risk management, preparedness has been featured in institutional capacity-building, incident command centre development and community preparedness.

The European Community-Philippines Strategy paper for 2007-2013 does not feature disaster or disaster risk. The European Commission's Disaster-Preparedness Programme (DIPECHO) for South-East Asia covers the EC's investment in disaster risk in the country, with a focus on community-based DRR. Work in the Philippines is seen as an 'exit strategy' based on the "transfer of experience of CBDRR (Community-Based Disaster Risk Reduction) models into government and development frameworks" (DiECHO, 2011).

### Analysing international emergency preparedness

The scale and scope of current initiatives is impressive. Almost every major international organisation is involved in some aspect of DRM, especially preparedness, since it spans the humanitarian/development divide and therefore brings in more possible actors. Preparedness activities are taking place within the major and relevant government departments, especially the five responsible for delivery

on the 2010 act: OCD, DILG, DWSD, DOST and NEDA. Preparedness is also a feature of work with many of the sectoral agencies such as the National Food Authority, the Department of Health and the Department of Education.

The geographic range of international preparedness initiatives involving local government and communities is also considerable. Six UN agencies, the International Organization for Migration (IOM), both the Federation and Committee of the Red Cross, and at least six international NGOs are involved in local preparedness. According to UN OCHA, only one of the country's sixteen regions is without at least a single preparedness activity. Some of those regions have multiple initiatives underway, such as Mindanao, the National Capital Region and Bicol. One of the highlights of the international community's involvement in preparedness over the years has been its targeting of the most vulnerable areas at the government and community level. Undoubtedly this has contributed considerably to the increased resilience in some of the hardest-hit and most disaster-prone areas.

Initiatives range from training in relatively narrow issues such as Sphere standards for local officials or building search and rescue capacity to assisting in drawing up multi-hazard, multi-actor contingency plans. Risk assessments help direct preparedness activities. Positioning and contingency planning undertaken by the international community has contributed significantly to reducing loss of life and the impact of disasters. Highly specific and tailored trainings have built capacity in camp management, emergency health management, and search and rescue<sup>31</sup>. On analysis, the international community is doubtlessly doing many things right in emergency preparedness in the Philippines, targeting the most vulnerable areas and transferring technology and expertise in key areas<sup>32</sup>.

Despite the good work being done (and the interviewees stressed that the standards in general were very high) there are significant reasons for considering the international community's work in emergency preparedness as in need of improvement. An objective view of the entire landscape of initiatives suggests quite strongly that emergency preparedness is fragmented into a set of fault lines<sup>33</sup>: short- and long-term, humanitarian and development aid, conflict and disaster, the international system and national actors. In fact in some particular ways the international community is much less coherent in its work in emergency preparedness than the government

<sup>30</sup> Note that frameworks may differ significantly from humanitarian plans from the same donors.

<sup>31</sup> See Annex 5 for OCHA's who, what, where for what they term 'response preparedness/disaster risk reduction' activities.

<sup>32</sup> It should be noted that there is more concern about the international community and DRM in general than about emergency preparedness in particular. See the concluding section for more details on this.

<sup>33</sup> See Kellett and Sweeney (2011) for a fuller explanation of the various 'fault-lines.'

itself. Essentially all the work indicated in the previous paragraph, as good as much of it is, is undermined by the fragmented way in which elements are undertaken, project-by-project, largely not coordinated as part of a package of either preparedness or wider DRR measures.

Broadly speaking, the international community's engagement with risk in the Philippines can be broken down into two halves. The first is the development community, represented by the UNDAF and development bank frameworks, with the UNRCO, UNDP and development banks as key actors, supported by other UN agencies, NGOs, etc. with development mandates. This work is more focused on supporting the DRRM act as a particular target. The other is the humanitarian community, driven by a need to respond to and prepare for regular crises – its clearest articulation seen in humanitarian action plans and appeals, where preparedness for response is essential 'now.' Neither of these perspectives is wrong. The issue is with the divide over a series of inter-related questions:

- The frameworks for international engagement in risk management are not comprehensive. Key actors in the country see the needs for preparedness through their own 'lens' (their mandates, programmes, partnerships, priorities) not simply based on what is needed, where and when. (Mandates within the UN family in particular fragment both understanding and action.) This means there is no single plan guiding the international community's engagement as a whole.
- The international system, like the government itself, is challenged by the continuous nature of crisis in the country, where there is little breathing room between disasters in particular. This makes shifting emphasis away from response to ex-ante investment in risk management much more difficult.
- Most donors that fund emergency preparedness are doing so through policies that are within their humanitarian departments and draw their funds from humanitarian sources. This ensures there remains a clear linkage between emergency preparedness and responses to crises.
- There is a lack of (shared) knowledge on some key issues. On the one hand this is seen in the wide views as to what is emergency preparedness, with some conceiving of it as narrow 'preparedness for response' and others as part of long-term capacity building. On the other hand many actors are not clear about who should be doing what. Representatives of several UN agencies wondered who was supposed to be in charge of 'doing preparedness'; others wondered who was supposed to be in charge of 'coordinating preparedness', and asked if that was different<sup>34</sup>.
- Within the UN system this lack of knowledge is compounded by a lack of expertise at a senior enough level to bring various aspects of the work together. At present the UN Resident Coordinator has eight national staff members but no international expertise. There is no one responsible for bringing all the pieces of risk management together, unless that responsibility falls (at least for the UN family) to the Resident Coordinator.
- The coordination structures in place do not manage to span the divides. In fact they largely exist within their own half of the divide. Development coordination is mainly done by sector and international actors working directly with government departments, rather than as part of a combined response to, for example, the Philippines Development Plan. The Philippines Development Forum (PDF), for instance, meets irregularly, usually only once a year. Only recently has it started to engage with DRM, with moves to incorporate its work within a working group on climate change. Humanitarian coordination is stronger (in part because of the integrated resource mobilisation that is attached) with a cluster system in a semi-permanent state, with each cluster headed by a government department with support from a UN partner. However, while these coordination structures in themselves represent a preparedness effort, and the appeal documents that guide their joint efforts stress the importance of preparedness, the quasi-permanent nature of the cluster system could actually be reinforcing the perception that emergency preparedness is very much linked to crisis and not to the long-term construction of government capacity. The government's own coordination system, the NDRRMC and various levels down to the *barangay*, are themselves largely crisis-focused and not yet strong enough to ensure adequate linkages back to the long-term development of government capacity demanded by the act.

The outcome of this split is a rather fragmented approach to risk management by the international community, one that is arguably inefficient and fails to deliver both short-term support to government and, especially, long-term sustainable capacity. Interventions into emergency preparedness are fragmented themselves in terms of approach and style. There are broad multi-aspect programmes that include preparedness as one outcome, and narrow training support in single areas – with both of these types of interventions seen either across many areas or focused on particular locations. The lack of a clear plan of support for the implementation of the DRRM act is at the heart of this. Such a plan would need to bring the wide range of international actors together, while providing coherence and clarity.

<sup>34</sup> No one questioned had heard of the letter between Valerie Amos (representing the Inter-Agency Standing Committee – IASC) and Helen Clark (representing UNDP) which made it clear that UNDP was responsible for national authority preparedness and UN OCHA responsible for the preparedness of the international system

## Financing emergency preparedness

The underpinning question that should be considered in this section is the relationship between the emergency preparedness work being undertaken and the financing of that work. How does the one inform the other? And what opportunities are there to improve preparedness across the board, among all actors?

### Funding the DRRM act

One of the first things that stands out upon examining national financing for risk management in the Philippines is the volumes of funding budgeted. In the three years from 2009 to 2011 the government budgeted close to US\$2.4 billion for DRR, with the 2011 figure more than

US\$350 million higher than the 2010 amount. In 2011, the volume spent on DRR reached 2.12% of the national budget. Overall trends are positive, with increasing volumes, although it is not yet clear whether the funding increase to 2011 was a result of the 2010 act being put into effect, or whether the upward trend will continue.

Preparedness is, nonetheless, not a significant item within overall expenditure, with only US\$18.8 million spent over the three years, although if we add the amount spent on hazard identification and monitoring (two areas we consider to be emergency preparedness for the purposes of this study) the amount rises to US\$107.4 million<sup>35</sup> (or 4.5%). This is not surprising given the amounts required for structural risk reduction, which make up the bulk of expenditures across each of the three years<sup>36</sup>.

**Table 2. Philippines DRR budget allocation, 2009–2011 (2011 prices in US\$)<sup>37</sup>**

	2009	2010	2011
Total national budget (Net of debt service) (US\$ million)	49,490.5	49,702.7	48,028.1
GDP current (US\$ million)	338,504.0	353,923.8	370,398.3
Population (million)	922.3	940.1	957.9
Hazard identification, mapping and assessment (US\$ million)	9.3	0.7	1.2
Hazard monitoring, forecasting and warning (US\$ million)	22.2	19.7	35.5
Research and development (US\$ million)	1.0	0.5	0.9
<b>Understanding hazards (US\$ million)</b>	<b>32.5</b>	<b>20.9</b>	<b>37.6</b>
Construction of flood control/seawall and drainage projects (US\$ million)	291.2	340.2	430.3
Maintenance, repair and rehabilitation of flood control and drainage systems and structures (US\$ million)	38.5	24.8	66.4
Forest management (US\$ million)	147.1	125.2	132.9
Risk mitigation and other services (US\$ million)	1.1	0.6	0.9
Preliminary and detailed engineering of disaster countermeasures (roads/bridges & flood control projects) (US\$ million)	12.5	7.4	5.0
<b>Minimising exposure (US\$ million)</b>	<b>490.4</b>	<b>498.2</b>	<b>635.5</b>
Preparedness (US\$ million)	5.2	8.8	4.8
Disaster response (US\$ million)	90.4	86.6	125.0
Sustainable recovery (US\$ million)	80.2	48.0	209.4
Risk financing (US\$ million)	9.1	3.2	6.9
<b>Lessening vulnerability/ building resilience (US\$ million)</b>	<b>184.9</b>	<b>146.6</b>	<b>346.1</b>
<b>Total DRR budget allocation (US\$ million)</b>	<b>707.8</b>	<b>665.7</b>	<b>1019.3</b>
Per Capita DRR budget allocation (US\$)	7.7	7.1	10.6

<sup>35</sup> This is from the three categories added together: US\$36.6 million in 2009, US\$29.2 million in 2010 and US\$41.5 million in 2011.

<sup>36</sup> It should be noted that the data on national budgets in this draft of the report are preliminary. The data presented is a stand-in for primary data on preparedness as articulated by the study.

<sup>37</sup> This table is adapted from one found in Rose and NEDA (2011) p. 28)

A more detailed examination of the various sub-categories under 'lessening vulnerability/building resilience' reveals additional opportunities for ex-ante investments in preparedness, especially through funds set aside for the calamity fund, which reached US\$185 million in 2011 (although this was in part driven by funding immediately set aside for response to recent high-impact typhoons<sup>38</sup>). Permissible activities include both man-made and disasters.

Although making these additional funds available for 'pre-disaster activities' within the budget is laudable, the

actual implementation to date may be in question. A report by IDMC into the government response to Typhoon Sendong suggests that President Aquino's argument against the use of the calamity funds for DRR was because the necessary change in mindset toward prevention and mitigation has not taken place.

*"While laudable, [the preparation of relocation sites/facilities, and training of personnel] must be weighed against the... need of maintaining sufficient provision under the Calamity Fund for actual calamities and prevent its full utilisation for pre-disaster activities."* (IDMC, 2013, p. 114)

**Table 3. Breakdown of lessening vulnerability/building resilience component of Philippines DRR budget allocation, 2009–2011 (2011 prices in US\$)**

	2009	2010	2011
Policy and planning (US\$ million)	0.26	5.49	2.25
Planning, direction and coordination for civil defence (US\$ million)	2.79	2.49	2.55
Establishment of DRR and harmonising action to negate disaster's adverse effects – LGU programme (US\$ million)	2.11	0.79	0.00
<b>Preparedness (US\$ million)</b>	<b>5.15</b>	<b>8.76</b>	<b>4.80</b>
Calamity Fund: Aid, relief and rehabilitation services to communities affected by calamities, including training of personnel, and other pre-disaster activities (US\$ million)	48.50	45.21	98.82
Rescue and relief operations to barangays affected by calamities (US\$ million)	0.00	7.86	0.00
Disaster response (US\$ million)	26.15	6.20	6.51
Assistance to victims of disasters and natural calamities including handling and hauling of commodity donations (US\$ million)	3.09	1.80	1.79
Quick Response Fund (US\$ million)	12.65	25.55	17.90
<b>Disaster response (US\$ million)</b>	<b>90.40</b>	<b>86.62</b>	<b>125.03</b>
Calamity fund: repair and reconstruction of structures, including capital expenditures for pre-disaster operations, rehabilitation and related activities (US\$ million)	35.85	33.41	87.64
Post Ondoy and Pepeng Short-Term Roads and Bridges Infrastructure Rehabilitation Project (US\$ million)	0.00	0.00	111.12
Disaster related rehabilitation projects (US\$ million)	0.00	0.00	9.32
Bridge construction project for calamity stricken areas (Austrian-assisted) (US\$ million)	44.39	14.60	1.35
<b>Sustainable recovery (US\$ million)</b>	<b>80.23</b>	<b>48.02</b>	<b>209.44</b>
Insurance coverage for school buildings (US\$ million)	0.00	1.97	2.61
National government subsidy for crop insurance premium of subsistence farmers under the Crop Insurance Programme (US\$ million)	7.75	0.00	4.24
Expansion of Crop Insurance Programme (US\$ million)	1.29	1.20	0.00
Assistance to LGUs on accessing Municipal Development Fund for DRR (US\$ million)	0.08	0.00	0.00
<b>Risk financing (US\$ million)</b>	<b>9.12</b>	<b>3.16</b>	<b>6.85</b>
<b>Lessening vulnerability/ building resilience (US\$ million)</b>	<b>184.9</b>	<b>146.6</b>	<b>346.1</b>

<sup>38</sup> Within the general accounting allocation of 2011 the government set aside 5 billion Philippine Pesos (PHP) for the calamity fund, 'for use in aid, relief and rehabilitation services to communities or areas affected by man-made and natural calamities, repair and reconstruction of permanent structures, including other capital expenditures for disaster operation, and rehabilitation activities, although it has a special provision allowing its use for pre-disaster activities.' Page 306, Philippines Development Plan.

However, the government challenged this criticism directly in a subsequent press release, citing a need for balance between pre- and post-disaster expenditures.<sup>39</sup>

Other criticisms include the slow pace of release of calamity funds and the alleged diversion of calamity funds away from response and DRR to other activities (IDMC, 2013, p 23). If there is one issue regarding government handling of financing for DRR that was questioned by many of those interviewed, it was the transparency of the use of all kinds of funds. While these comments did not necessarily suggest corruption, the absence of information (which in itself is probably an absence of knowledge management as indicated in the analysis section of this paper) is leading to more cynical interpretations.

One of the key points mentioned in the discussions with national actors was that the volumes of funding received for the range of emergency preparedness actors was not a problem. It was suggested that absorptive capacity was more of an issue.

### Local level preparedness financing

Local financing for preparedness is considerably complicated by the relationship between national government and local areas in terms of resources and expenditure, and by the many options (each with their set rules and processes) for government to access additional DRR funding. There are at least seven different ways LGUs can fund work in DRRM from within their own budgeting alone.

The one most relevant to actual preparedness activities undertaken by LGUs at municipal and Barangay level is the DRRM Fund. This fund is made up of a minimum of 5% of the local revenues raised by municipalities that are returned to them by central government. LGUs can decide to spend considerably more than the 5% minimum, which has to go to the four areas under the DRRM act: reduction, response, preparedness and recovery. It must, however, set aside for response a minimum of 30% of whatever it decides to allocate to DRRM. Theoretically the remaining 70% could go to preparedness.

While this appears to be an admirable way to manage local DRR expenditures, by ensuring a minimum is set aside for DRRM, but allowing the devolved administrations to make choices about the priorities within that minimum, actual implementation has highlighted key connections to underperforming LGUs, especially related to available resources. Poor municipalities may only have allocated total expenditures of US\$25,000 or less per year, to stretch across a wide range of needs. This might mean as little as US\$1,250 is available to spend on each of the four areas under the DRRM act. (Even with funding from

other sources such as rents, the poorest municipalities are under considerable financial pressure when it comes to delivering on preparedness.) The lack of local capacity may also prevent some of these LGUs from being able to creatively find other resources for their DRRM needs, such as indicated in Table 4. In those areas at threat from climate-related risks (which in the Philippines make up a large part of the country), an additional burden requiring financing is the preparation and implementation of a local climate change adaptation plan; the People's Survival Fund (created to provide additional funds for this) has not yet been approved by parliament.

## International funding for emergency preparedness

### General aid profile for the Philippines

Traditionally the Philippines has been a significant recipient of official development assistance but not of humanitarian assistance. Over the last ten years it has received US\$13.2 billion of ODA from a range of donors, usually ranging between US\$1.2 and US\$1.6 billion per year. It should be noted however that almost US\$8 billion of this ODA has been in the form of loans, the bulk of which has come from the Japanese government (US\$7.2 billion.)

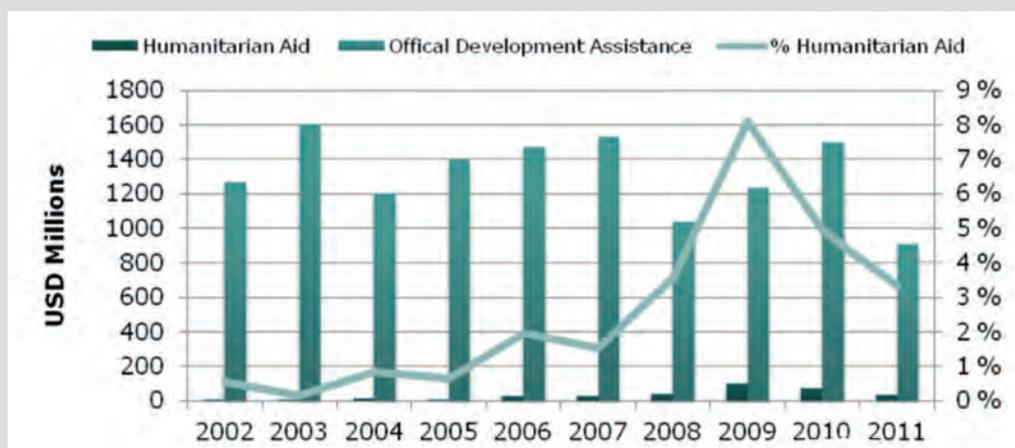
**Table 4. LGU budget possibilities and objects of expenditure**

LGU budgets	Objects of expenditure
<b>1) General funding</b>	
– Personnel Services Fund	Salaries and wages of DRR/CCA staff
– Maintenance and Other Operating Expenses Fund	Supplies and materials for DRR/CCA office
– Capital Outlay Fund	Infrastructure, building, equipment
<b>2) 20% Local Development Fund</b>	Development, resilience, and adaptation
<b>3) +/- DRRM Fund</b>	DRR Fund
<b>4) Local CCA Fund</b>	CCA Fund
<b>5) 10% SK Fund (barangays only)</b>	Youth development programmes and projects
<b>6) New fees and charges</b>	DRR/CCA Initiatives
<b>7) Cost-sharing of LGUs</b>	DRR/CCA Initiatives

Source: adapted from Marinduque Council for Environmental Concerns (MACEC), Ateneo School of Government, Manila Observatory, Coastal Core Sorsogon, Aksyon Klima Pilipinas, Regional Climate Change Adaptation Platform for Asia, Province of Albay, Province of Iloilo (2012), p. 31).

<sup>39</sup> 'No Veto on P5-billion Calamity Fund', Official Gazette of the Philippines Government, 21 December 2011.

Figure 4. Development assistance to the Philippines, 2002–2011



Source: Author, based on DAC data.

Table 5. Largest donors to the Philippines 2003–2012

	Loans	Grants	% grants	Total ODA
United States	114.1	1,219.6	91%	1,333.7
Japan	7,267.5	1,102.6	13%	8,370.1
Australia	0.0	958.3	100%	958.3
Germany	190.8	395.2	67%	586.0
EU institutions	0.0	276.7	100%	276.7
Spain	104.9	226.9	68%	331.8
Canada	0.0	189.0	100%	189.0
Netherlands	0.0	143.2	100%	143.2
Norway	0.0	136.0	100%	136.0
Belgium	3.1	87.3	97%	90.4
Remaining 10 donors	314.7	342.1	52%	656.8

Source: Author, based on DAC data.

Humanitarian assistance meanwhile has been a small component of ODA, reaching just US\$322.9 million over the decade, a rather small figure considering the many crises the country has faced. Of this humanitarian financing, US\$100 million came in a single year (2009) largely in response to Typhoon Ketsana. That year, the proportion of international humanitarian financing peaked at just over 8% of ODA; over the decade the proportion was just 2.5% though if we factor out the US\$8 billion of loans, the priority to humanitarian response increases to just over 6% over the decade.

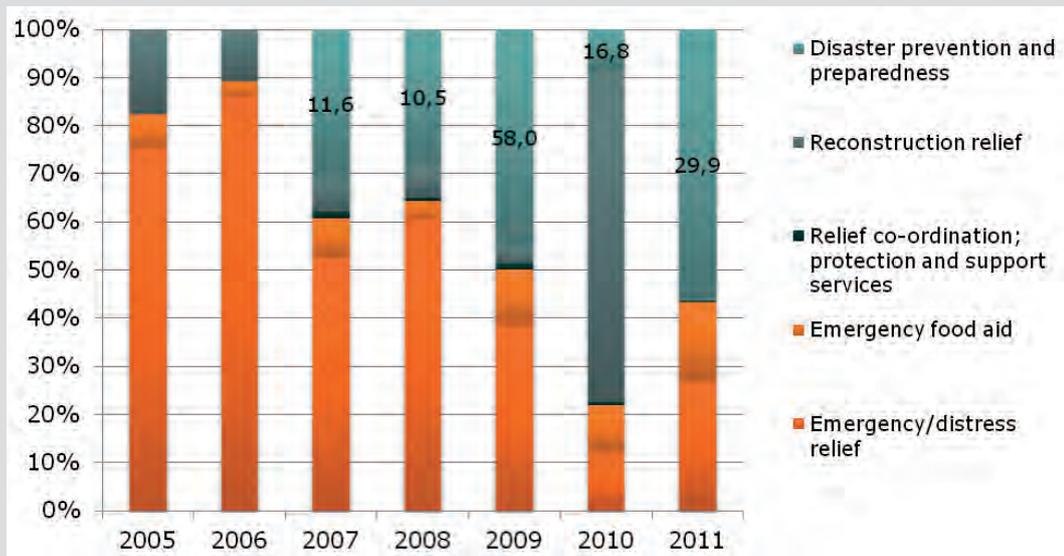
The Philippines has a rather narrow donor base for ODA. Of the DAC donor governments, five of these (United States,

Japan, Australia, Germany and the EU) have accounted for US\$3.9 billion of grant ODA over the decade, 77.9%. The top 10 donors account for more than 93%.

### Funding emergency preparedness

The challenges of counting emergency preparedness investments in the Philippines are no less great than in other contexts. The same lack of an appropriate tracking system for ex-ante investments makes accounting for preparedness extremely challenging. One of the few tools we have is the OECD DAC and its humanitarian coding for 'disaster prevention and preparedness' which increasingly looks anachronistic, given the needs and the multi-risk nature of humanitarian work and

**Figure 5. Proportions of bilateral humanitarian assistance to the Philippines, 2005 to 2011**



Source: Author, based on DAC data.

the fact that most believe disaster prevention to be a development issue.

Within the overall structure of humanitarian reporting, there are some positive elements. The trend over time suggests that more money is going to ex-ante activities, in terms of both volume and proportion, with an unevenness largely accounted for by projects reported in one year but being spent over several years. The US\$58 million in 2009 was largely made up of US\$47 million from Japan (US\$10 million of which went toward flood prevention, although US\$35 million went into a substantial investment in the meteorological radar system). The 2011 figure of US\$29.9 million was largely made up a bundle of projects funded by both Japan and Australia (US\$13 million and US\$12 million, respectively).

### Channels of delivery for emergency preparedness

Emergency preparedness as defined by the study covers a wide range of project activities, some of which are closely related to crisis response, such as the capacity of governments to undertake search and rescue, or to longer-term initiatives in early warning and hazard-mapping, which involve considerable investments in technical infrastructure as well as capacity.<sup>40</sup>

Unsurprisingly then, this affects the funding portrait for

emergency preparedness, especially in a context like the Philippines where long-term investment in government preparedness capacity needs to coexist with improving short-term response to crisis.

A detailed analysis drawing from a broad range of sources reveals several relevant patterns for emergency preparedness<sup>41</sup>.

Bilateral funding arrangements forged in the Philippines itself appear to be the conduit for much of the emergency preparedness work<sup>42</sup>, and this has certainly informed an overall fragmented picture of international support.

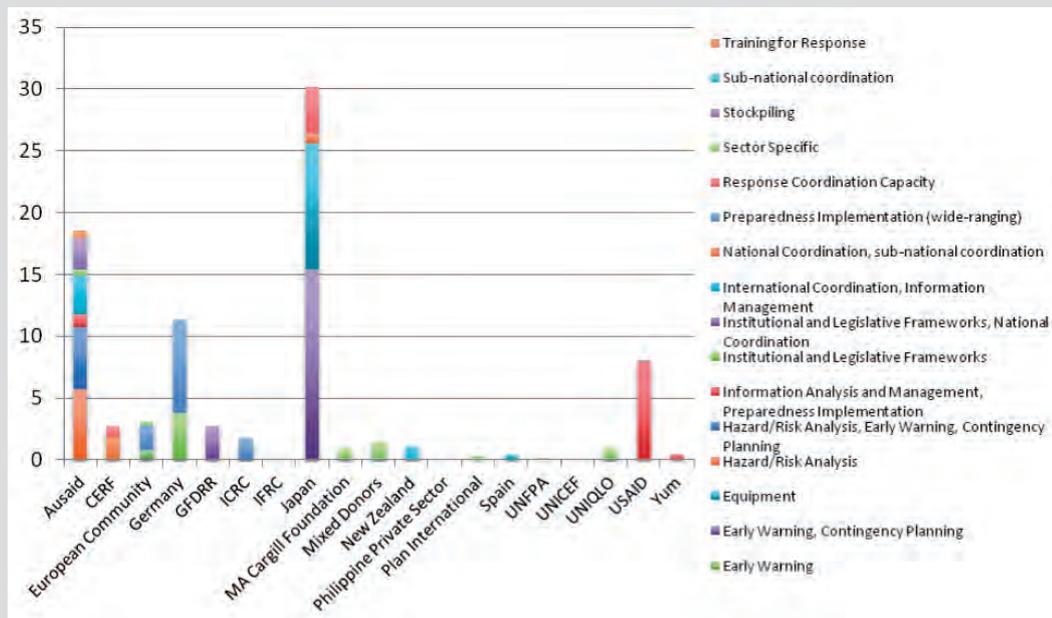
There are several major initiatives funded by international donors, funding both national and international actors. That funding is heavily concentrated, however, with just a few donors accounting for the bulk of money spent on emergency preparedness. Of the total US\$84.6 million for emergency preparedness, Japan's US\$30.2 million accounts for 37.3%. Adding together that of AusAID, Germany and USAID (US\$18.6 million, US\$11.4 million, and US\$8.1 million, respectively) means that the top four

<sup>40</sup> The data presented in this sub-section may suggest, that quantitative information does exist at a country level. In fact this information only came through individual discussions with donors, implementing agencies and governments, bringing together emergency preparedness projects one-by-one, and in the absence of any project standardisation, setting up a series of 'labels' useful for categorisation, such as project length, donor type, and emergency preparedness type.

<sup>41</sup> This data was prepared from a variety of sources by the author, and tailored for the needs of this study. See the annex for both the revised matrix of emergency preparedness activities and the project-by-project data. Note that data from the Asian Development Bank (ADB), is being prepared by the institution and will be included in the final draft. In addition, given the tailoring undertaken to prepare this data, the author requests that all relevant actors in the Philippines check the manner in which their programme or project has been represented.

<sup>42</sup> Bilateral funding from donors present in the Philippines can of course also respond to projects included in the UN appeal. However, given the minimal inclusion of emergency preparedness within appeals, we can be relatively certain that there is little likelihood of duplication.

**Figure 6. Emergency preparedness financing activities ongoing, by donor and activity**



Source: Author, based on data collected directly from organisations, as well as the OCHA Financial Tracking Service. See annex 7 for the full table of data.

donors account for US\$68.2 million or 84.3% of the total. This makes it very clear that the current donor sources of emergency preparedness are limited, a challenge to be overcome if activities funded through international sources are set to increase.

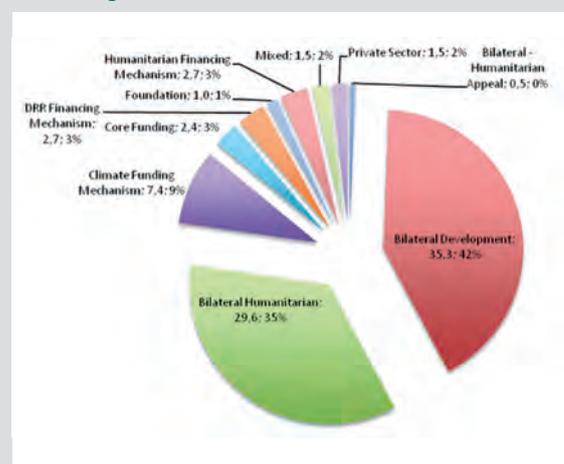
This said, not all of the projects underway focus exclusively on emergency preparedness. Detailed analysis suggests that only 19 of the total of 35 projects focus only on emergency preparedness. The volume of strictly targeted funding is thus reduced to just US\$40.7 million and the number of sources of funding<sup>43</sup> to just 11. What this suggests is how emergency preparedness is difficult to trace because sometimes it is simply buried in other articulations of risk management or even response. Evidence from the Philippines shows that emergency preparedness is undertaken as part of emergency response core funding, as part of a DRM programme, or as part of a long-term climate change adaptation financing project.

The next and quite obvious point from Figure 6 is how fragmented the approach is to implementing emergency preparedness. There are many different formats for emergency preparedness, from narrow training activities to multiple activity programmes. This makes understanding the big picture a considerable challenge. It also makes tracking investments considerably difficult at a country level.

Of some importance for this work is the channel of delivery for emergency preparedness: precisely what kinds of funds are financing emergency preparedness at a country level.

There are obvious concentrations of funding within certain channels of delivery. Bilateral funding at a country level accounts for the bulk of emergency preparedness (Figure 7), 35% of it managed by humanitarian donors and 42% by development donors. The remainder of the funding is made up of climate finance, with some money

**Figure 7. Channels of emergency preparedness financing**



Source: Author, based on data collected directly from organisations, as well as the OCHA Financial Tracking Service. See annex 7 for the full table of data.

<sup>43</sup> This includes private sector, foundations etc. See Annex 7 for a more detailed breakdown of full and partially focused emergency preparedness projects in the Philippines.

from core resources, the private sector, etc. Humanitarian funding mechanisms and tools clearly provide only minor routes for financing emergency preparedness.

Further analysis of these channels of delivery reveals that bilateral development funding is almost exclusively from Japan and goes to a range of long-term technical infrastructure projects supporting early warning and hazard-mapping. The bilateral humanitarian funding is also highly concentrated, coming from just three donors (AusAID, USAID and DIPECHO). The activities funded, however, are very mixed, with a range of projects from community-level preparedness to international coordination and institutional capacity building. Essentially emergency preparedness is funded along the two broad humanitarian/development halves indicated in the 'international' section of this paper.

A further observation is that when a project has solely 'emergency preparedness' objectives, most of the funding, 67% or US\$27.4 million, comes from bilateral humanitarian sources. Of the US\$43.9 million spent on projects and programmes that include emergency preparedness as an objective, the funding profile changes. Bilateral humanitarian funding almost disappears, replaced with 57% (US\$25 million) from bilateral development sources and 17% (US\$7.4 million) from climate financing. There is a strong suggestion that emergency preparedness in the Philippines largely occurs within the humanitarian community and related to humanitarian crises; and where it does enter the development community, it is usually through a much larger initiative. There are clearly different approaches to the same issue.

It is not clear from the data if the observation from phase one of this study (Hannah and Sweeney, 2011) which highlighted that much of emergency preparedness financing comes from humanitarian funding, and is unequal to the task of long-term preparedness capacity-building, rings true in the Philippines. Although these three donors (AusAID, USAID and DIPECHO) manage their emergency preparedness work from their humanitarian teams, the evidence suggests there is considerable thought to at least mid-term development. AusAID's multiple programmes managed by their humanitarian team feature many technical development programmes, at least as many as those closely linked to crisis response. There appears to be no limit in years of funding for emergency preparedness activities from these humanitarian sources, as if the fact that the humanitarian team is managing these projects is simply management choice. The USAID/OFDA (Office of US Foreign Disaster Assistance) funding for the World Food Programme's (WFP) emergency preparedness programme across the country is largely limited to single year funding. Yet while this suggests a lack of certainty about the future, and throws into question sustainability, the US has actually funded the programme not just once more, but twice more, and does not appear to be considering pulling back on funding.

## Financing tools and mechanisms

### The Central Emergency Response Fund

The Philippines has featured fairly regularly in funding from the CERF since its establishment in 2006. Over the past seven years, more than US\$45.8 million had been funded in the country, US\$35.4 from the rapid response window and the remainder from the underfunded window. An analysis of recent years of CERF funding reveals very little expenditure on preparedness, with only 3 of 40 projects having partial preparedness objectives with two very similar WFP projects undertaking disaster preparedness in conflict-affected areas of Mindanao, and one part preparedness project undertaken by UNDP.

An analysis of recent years shows the following:

2013: Through the rapid response window the CERF continued to fund Typhoon Bopha operations, with UNHCR (the UN Refugee Agency) and ILO (International Labour Organization) and WHO funding a project each, none of which featured emergency preparedness.

2012: For the rapid response window the CERF gave US\$9.1 million in ten projects to four UN agencies and the IOM. All of these projects were in response to Typhoon Bopha so they did not entail preparedness in that sense; neither were any of the projects funded by the CERF.

Through its 'underfunded emergency' window the CERF also funded six UN agencies and IOM through eight projects for a total of just under US\$4 million. One of these eight projects features preparedness as a part objective, with funding to WFP for US\$0.9 million.<sup>44</sup>

### Box 9. Conflict preparedness financing data

It should be noted that the available data, drawn from many sources, indicates little about the distinction between preparedness for conflict and preparedness for natural disaster. Within national data sources used for this report there is no reference to conflict data. Within the international sources, using the tailored data, we are able to identify only two projects targeted towards conflict-affected populations directly (which is not the same as saying that other projects may not have such a target population.) This is the US\$1.7 million of the ICRC, and the US\$900,000 provided by the Central Emergency Response Fund (CERF) to WFP for 'conflict-affected areas of Central Mindanao.'

<sup>44</sup> Assistance to IDPs, Returnees and other Food-insecure Households in Conflict affected areas of Central Mindanao and Strengthening National Capacity on Natural Disaster Preparedness and Response

Another project for US\$1.8 million to UNDP was reported as being partly for preparedness activities although the project description is within the economic recovery and infrastructure sector<sup>45</sup>, and features no clear preparedness term within the project title.

2011: 19 projects were funded for the Philippines, through both rapid response and underfunded windows, mostly for conflict-related assistance for Mindanao with the remainder in response to Typhoon Washi. Again, only one project had a part-preparedness objective, which in wording is identical to that funded for WFP in 2012. The only difference was the volume of funding US\$1.8 million.

### Humanitarian appeals

Humanitarian appeals clearly link preparedness, and especially government capacity, to improving future responses to crises. The Mindanao humanitarian plan (with its more conflict-related focus) states that there is a need for “assisting the government to develop multi-agency disaster response plans” (UNOCHA, 2013a, p. 30). The revised appeal for the most recent of typhoons states that the continued “humanitarian response to Typhoon Bopha should be conducted in a manner which builds government capacity for DRRM and emergency response” (UNOCHA, 2013b, p. 42).

Yet despite articulating these key issues, the appeals themselves are not vehicles for presenting projects for financing, and even when projects are presented they are rarely funded.

Since 2004 there have been six UN consolidated or flash appeals in the Philippines with Mindanao conflict or typhoon response the usual focus, with final requirements of US\$394.9 million drawn from 352 projects. A detailed analysis reveals that only 11 of these 352 projects had a partial objective of preparedness, and only five of them were funded: three for UN OCHA, one for WFP and one for Plan International. None of the 2013 projects with preparedness components have as yet been funded.

The total emergency preparedness articulated through appeals was US\$3.8 million (1% of the total requested) with US\$2.7 million (1.7%) of that funded.) UN appeals are clearly not the vehicle for funding emergency preparedness in the Philippines.

### Global Facility for Disaster Reduction and Recovery

The Philippines is a priority country for the Global Facility for Disaster Reduction and Recovery (GFDRR). To date it has funded five projects in the country. Several of these – support for the post-2009 typhoon post-disaster needs

### Box 10. Comments on international financing

Agency and organisation experiences of raising funds for preparedness are at best mixed. Most fundraising is through bilateral relationships. Clearly funding mechanisms have not been a major contributor to preparedness in the past. Evidence suggests preparedness funding from humanitarian mechanisms goes to more humanitarian actors to do preparedness for response activities. Other mechanism sources (such as GFDRR and climate change funds) largely fund government agencies directly, as do the bilateral development donors. There is an area between the two that is problematic, which is the gap between preparedness for response actions and longer-term preparedness, especially involving long-term support, such as early warning and institutional support.

assessments (PDNAs) and a project to support high-risk LGUs – have been completed. Three are currently running:

- Supporting the Philippines DRRM Agenda.
- Reducing Vulnerability to Flooding in Metro Manila – Flood Management Master Plan: US\$1.65 million.
- City-to-City Sharing Government Capacity to Manage Natural Disaster Risks: US\$1.15 million.

Of these three projects, only the first (supporting the DRRM Agenda) has obvious emergency preparedness components, which take the form of long-term capacity-building of government for response. (The second project – Manila’s flood management master plan – may suggest it includes preparedness components but it is in fact much more focused on long-term urban land use.)

### Climate change adaptation mechanisms

According to Climate Funds Update<sup>46</sup>, which is the most comprehensive of climate change fund tracking facilities available, the Philippines has received substantial funds.

At present, 14 projects are underway from four different sources of funding. Of them, however, the majority are for mitigation activities, as is a large part of the funding (US\$148.2 million, or 84% of the total.) Preparedness activities, should they be funded through climate change funds, are only likely to be found within the remainder of the projects. Of these, only two would be likely to feature at least some component of emergency preparedness, both of which are funded through Germany’s climate initiative:

- Adapting to Climate Change and Conserving Biological Diversity: US\$3.6 million.
- Supporting the Philippine Climate Change Commission in implementing a national climate strategy US\$3.8 million.

<sup>45</sup> Reported in conversation with UNDP BCPR representative for South-East Asia

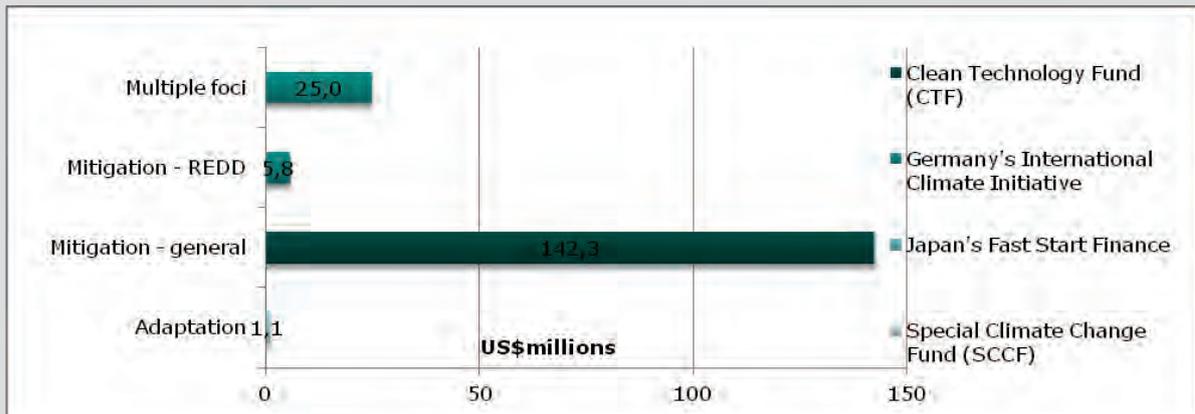
<sup>46</sup> www.climatefundsupdate.org

**Table 6. Funding requests for emergency preparedness, through UN appeals, since 2004**

Appeal Name	Organisation	Cluster	Project detail	Requested amount	Funded	% Funded
Philippines 2013	Family Planning Organization of the Philippines	HEALTH	Strengthening the Capacities of LGUs in North Cotabato and Maguindanao on Implementing the MISP for Reproductive Health during Humanitarian Emergencies and for Peacebuilding	92,450	0	0%
	Mindanao Migrants Center for Empowering Actions	PROTECTION	Typhoon Bopha: Enhancing community capacities for prevention and response to human trafficking and gender-violence in affected communities in Region XI and Caraga	49,500	0	0%
	United Youth for Peace and Development, Inc.	FOOD AND AGRICULTURE	Enhancing Agricultural Productivity and Conflict Resolution Capacities of Local and Internally Displaced People (IDP) Farmers in Conflict Affected Areas in Maguindanao and North Cotabato Provinces	210,000	0	0%
	UNDP	EARLY RECOVERY	Support to the Enhancement of Local Disaster Risk Reduction Capacities in Mindanao	500,000	0	0%
Philippines Humanitarian Action Plan 2012	UN OCHA	COORDINATION	Strengthening humanitarian coordination and advocacy in the Philippines	1,061,540	959,707	90%
Mindanao Humanitarian Action Plan 2011	World Food Programme	LOGISTICS	Assistance to IDPs, Returnees and other Food-Insecure Households in Conflict-affected Areas and Strengthening National Capacity on Disaster Preparedness and Response (Logistics Support; Provision of Transport and Warehousing Services)	350,000	200,069	57%
Philippines Flash Appeal (Revised) (Oct 2009–March 2010)	Food and Agriculture Organization	AGRICULTURE	Effective Humanitarian Response Through Enhanced Cluster Coordination of Agricultural Emergency and Rehabilitation Intervention Through Agriculture Cluster	380,000	0	0%
	UN OCHA	COORDINATION	Support to the Humanitarian Coordination Structures in the Philippines	941,997	1,093,283	116%
	Plan International	EDUCATION	Education and DRR Support for Children Affected by Typhoon Ondoy (international name Ketsana)	177,878	177,878	100%
Philippines 2004	UNOCHA		Incorporating risk reduction practices in the recovery process	40,000	265,252	663%
Philippines 2004	UNDP		Incorporating risk reduction practices in the recovery process	50,000	0	0%

Source: Author, based on data from OCHA FTS.

Figure 8. Climate change funding, ongoing projects, Philippines



Source: Climate Funds Update.

### Development banks

While they are not finance mechanisms as such, development banks can certainly be considered channels of delivery. Both the World Bank and Asian Development Bank have substantial risk programming in the Philippines.

The World Bank has 10 initiatives underway in the area of DRR, a mix of both standalone capacity-building programmes and programmes with a heavy risk-related cross-cutting element. Four of these programmes are for the Philippines alone, the rest being regional. One of the country-level programmes is implemented through the GFDRR funding mentioned above. The three remaining programmes are as follows:

- Capacity-Building PDNA and Transparent Monitoring of Disaster-Related Expenditures US\$500,000.
- Reducing Vulnerability to Flooding in Metro Manila, US\$1.6 million.
- Supporting Local Government Capacity to Manage Natural Disaster Risks in the Philippines, US\$1.1 million.

While there are elements of preparedness within each of these programmes (especially in the building of long-term national response capacity) none of them target it alone.<sup>47</sup>

### Private sector

As already mentioned, the private sector is funding preparedness in the Philippines, and there does appear to be potential for growth, especially given the sector's interest in disaster risk in general, and the relative financial wealth of the country. There is also potential to increase funding by international corporations working in the country. Funding for preparedness that we can track includes:

- Yum (corporate restaurants) fund WFP US\$100,000 for their emergency preparedness capacity-building project.
- UNIQLO (clothing retailer) fund UNICEF and government partners to build a safer schooling system, work that in part includes preparedness.
- The Corporate Disaster Response Network has implemented 15 largely preparedness-related projects with funding from eight different companies or corporations. It is currently implementing 11 local emergency preparedness projects (largely contingency planning at a local level) funded by eight different private sector sources. Total value is just below US\$70,000.

It should be noted that anecdotal evidence suggests private sector involvement in preparedness is significantly greater than these highlighted projects indicate. However, there is no central source of information in the country that can at present shed light on the full contribution.

## Summary and recommendations

### Key findings

The following represent the key findings across financial and related emergency preparedness issues:

1. Disaster risk is an ever-present issue in the Philippines and it continues to inform a high degree of risk-consciousness, which is translated into comprehensive DRR legislation and structures, as well as the integration of risk into development planning.
2. Technical risk related activities, such as meteorological early warning, is good, but communications of risk in general is in need of improvement. Coordination across different structures of government, and different agencies is also an area that is considerably uneven.

<sup>47</sup> Similar information was requested from the Asian Development Bank, but was not forthcoming.

3. The local level implementation of preparedness is weak in some places, and in need of investment.
4. The national government has committed significant funding to disaster risk in general – more than US\$1 billion in 2011. Funding to local levels is considerably uneven however, with the poorest municipalities often being those that have the least resources but the most need.
5. International support for risk management is considerable, framed strongly by a series of policy and related strategy documents that highlight the challenges the country faces.
6. One of the highlights of the international community's involvement in preparedness over the years has been its targeting of the most vulnerable areas at the government and community levels. Undoubtedly this has contributed considerably to the increased resilience in some of the hardest-hit and most disaster-prone areas
7. Financing for preparedness is highly fragmented however, project by project. Bilateral humanitarian financing mostly focuses on narrowly conceived preparedness for response, and bilateral development funding focuses on long-term, usually expensive early warning investment. In addition there is a missing element in the middle that does not appear to be funded: helping build long-term capacity, linked to long-term funding for capacity.
8. This fragmentation is in part informed by a similar split drawn along coordination platforms, which tends to reinforce a divided engagement from the international community. The lack of a truly comprehensive engagement (articulated in a plan of action) with government, drawing in the bulk of international actors, contributes considerably. (The absorptive capacity of government is an issue in key departments, and this fragmentation adds to the burden of work.)
9. Donors are as split as implementing agencies, often (but not always) funding risk management from humanitarian budgets. The donor base is small in the country with just five donors accounting for close to 80% of all funding over the last ten years.
10. Emergency preparedness is difficult to trace because it is buried in other initiatives. Evidence from the Philippines shows it is undertaken as part of emergency response core funding, as part of a DRM programme, or as part of a long-term climate change adaptation-financing project.

### Box 11. Remittances in the Philippines: an opportunity

Remittances play a massive part in the Philippines economy. In 2012 they were estimated to have reached US\$24 billion, only behind India, China and Mexico in absolute terms, and much higher than those in per capita terms. This US\$24 billion was 6% higher than 2011 and represented 10% of the country's entire GDP. These remittances are dominated with flows from the US, Canada, Saudi Arabia, the United Kingdom and Japan (World Bank remittance data).

There is an opportunity for the Philippines to target remittance flows towards preparedness (though the concerns expressed over how money would be channelled, allocated, prioritised, and issues of transparency and accountability need to be highlighted).

On the one hand there is evidence that remittance flows increase in response to disasters, especially in the case of countries with the largest numbers of migrants abroad. According to one study "for every dollar in disaster cost, remittances would increase by 50 cents for a country where the emigrant stock is about 10% of the origin country population. In subsequent year, the increase would be an additional one dollar." (Mohapatra et al., 2009)

Secondly, UNDP already has a project underway (funded by Western Union) to develop mechanisms to engage diaspora communities in funding entrepreneurship and employment.

Finally, the Commission on Filipinos Overseas (CFO), under the Office of the President, has several goals that target socioeconomic development through Filipino migrants, in the form of resources, knowledge, skills and technology overseas.

If these three elements can be harnessed in preparing for disasters rather than responding to them, there is significant potential for the future of risk management, especially at a local level. Even relatively simple approaches, such as persuading families to save and invest received remittances, rather than spend, would build community resilience to disasters. However, it should be noted that although remittances may provide a useful additional financing for preparedness, it cannot replace the necessary institutional capacity that is required.

## National government recommendations

For national government the funding of emergency preparedness is not the main issue, at least at a national level; in fact for the full range of DRR activities the government is clearly investing far more than the international community, although we do not fully know if this amount is adequate in the face of need. Key recommendations for government are to focus on delivering on the act itself, especially at community and local levels, where it counts, while at the same time tackling head-on the issues brought to the surface after two years of implementation under the act, implementation that has often occurred in the face of significant crises.

Issues to be addressed include the following:

1. Improved coordination across technical agencies and across key DRM departments, which may also require revising and clarifying mandates. Preparedness (as addressed by this study) is split across agencies.
2. The stronger policing of implementation, including better transparency and clearer accountability to stakeholders.
3. Targeting the poorest and most vulnerable LGUs, which need the most support. (This should be linked to advocacy and connected to development programming, highlighting the links between disaster risk and vulnerability in general.) Dedicated financing should be made available to these poorer municipalities.
4. Building increasing incentives into all levels of government (whether national or local) to foment a focus on risk reduction through ex-ante investments, rather than response, in order to bring about a shift in the mindset.
5. Build into all of this an integrated approach to climate risk and disaster risk, and unify approaches, streamlining both programming and funding. This will entail continuing the progress bringing the priorities of the NDRRMC and Climate Change Commission closer together; consider using national and international financing as an incentive to do this.
6. Clarify the roles of government actors in response to conflict-affected populations in Mindanao, especially those under the DRRM act.
7. Perhaps above all else, there needs to be a marked improvement in knowledge management by government, with a clear articulation of requirements, and a considerably better understanding of all the risk-related work that is underway. This needs to be widely circulated and continually updated.

### Box 12.

#### Investigate other sources of financing

A range of civil society actors are clearly engaged with tackling the country's disaster risk (and to an extent conflict risk as well.) Government and the international community should look for ways of tapping into the potential for financing preparedness, building on existing initiatives. Two areas in particular offer substantial potential: using the massive remittance volumes for preparedness and other ex-ante investments, and bringing the Filipino private sector much more firmly into risk management.

This cannot and should not be seen as a replacement to the much-needed institutional building for preparedness.

## International community recommendations

For the international community there is a financial element to the issues that need addressing, with some areas clearly requiring financing. However, overall even these financial elements are part of the main problem: coherence. At present the work of emergency preparedness is broadly split along two lines, a development track articulated through UNDAF and development bank strategies, and connected to long-term DRM integration into governance, and a crisis-related track articulated through common appeals and the cluster system. This is a representation of the fragmented nature of the international system, and the financing channels used to fund aspects like emergency preparedness.

Issues to be addressed are therefore as follows:

1. First and foremost, the need for a much better understanding of what is needed, and where. This should be tied into the development of a clear plan of action for emergency preparedness, one that outlines the financial requirements related to the need, and the agencies and organisations from across the international community that are best placed to act.
2. However this also requires a considerable effort to improve the clarity of roles and responsibilities, especially within the UN system. It is not clear whether this should be managed locally (more closely matching country context and comparative advantages) or should be done in liaison with the IASC, UNDG and UNISDR.
3. A detailed examination of coordination platforms for risk management is needed. At present the cluster system, managed by OCD, reinforces the crisis 'track' of emergency preparedness. The perceived permanence of the cluster system suggests a permanent 'preparedness', but in actuality few clusters operate

outside of crisis and the management of many by DSWD is unsuitable for pushing through on preparedness. The development side has yet to fully ensure DRRM is represented strongly enough within its coordination structures; more needs to be done, with the caveat that climate risk must be integrated. Having an UNDAF, development bank strategies and NGO DRM plans all focusing on risk management is not evidence of adequate coordination alone, since these documents and approaches focus on what each institution or group of actors will do. There is not enough of an overarching structure that brings it all together. In the absence of a more holistic coordination/funding structure, the focus should now be on the development architecture, supporting long-term national capacity.

4. Beyond adequate coordination there is a need for a long-term plan of engagement with the government's risk management work, especially for disasters. The government's plan runs from 2011 to 2028. The international community needs a similar length of vision for support to the DRRM act. This plan should assign roles and responsibilities for a range of emergency preparedness and related risk-management initiatives in the long term, ensuring some of the missing preparedness activities are clearly articulated, and hopefully, funded.
5. Financing can incentivise both good and bad practice. Donors should avoid funding bilaterally with agencies in absence of a full understanding of the requirements, government and international plans, or comparative advantages of various implementing actors.

Evidence suggests that the financing for emergency preparedness is considerably affected by these structural issues, and to some extent, informs them. Currently, while there is money for emergency preparedness, it is driven by the need to respond to crisis, and to a lesser extent by long-term investment. Institutional capacity building (at least in a comprehensive fashion) appears to be difficult to fund, at least under the present structures and with the currently available mechanisms. Addressing the issues above would mean substantial progress toward improving this situation. However, specific financing opportunities the international community should consider include the following:

1. Widening the donor base through direct advocacy. With support of government and existing donors that fund preparedness, implementing actors should look beyond current funding partners. This should include donors who finance in the Philippines but not for

preparedness, such as Belgium, Canada, the Netherlands, Norway, South Korea and Sweden, as well as potential donors beyond members of the Organisation for Economic Co-operation and Development (OECD).

2. Engaging development actors and donors, not just the humanitarians, and linking risk management to long-term development of the Philippines, and the delivery of the MDGs.
3. Advocating beyond the Philippines for a considerable improvement in the options for financing emergency preparedness, bringing forward the challenges (and the underfunded work) from recent experience. Particular attention has to be brought to the gap between crisis-focused preparedness and longer-term capacity building.
4. Using in-country structures to strongly align funding for DRM and CCA together, with joint planning, programming and implementation.

### Concluding point

In summary, the overall picture for emergency preparedness in the Philippines is largely positive. Disaster risk in particular is high on the agenda of government, civil society and the international community. The foundation of the good work underway in preparedness consists of the strong legislation, framework and plan, and the institutional set-up nationally, backed up by the depoliticised nature of discussions on risk and risk management. There are probably few examples of a developing context where so much is happening on risk management and fewer still where the consciousness of risk is so high. There is a great variety of work underway and much of it is reportedly of high quality. The government has issues to address in delivering under the DRRM act, especially at local levels, and in ensuring coherence and communications across such a wide range of work. For the international community, improved financing for emergency preparedness will help fulfil the unmet needs within its area of support and expertise, but it is clear those needs are much more about the structure of the system (and the financing channels that reinforce it) than about the actual volume of funding.

The time is ripe for this further development of risk management in the country. Both national and international actors should seize the opportunity of a likely successor to the HFA, to the MDGs and of a new climate treaty, to focus attention once more on the inter-connections between risk and development – this is a unique moment.

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## Annex 1. Detailed disaster history of the Philippines: 2004–2013

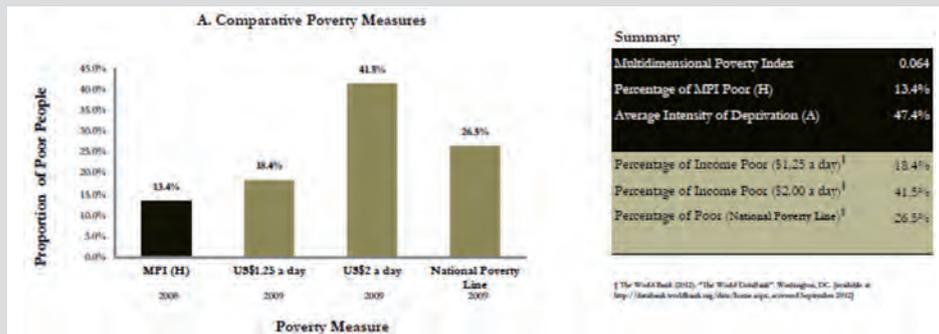
Category	Sub-category	No. of events	People killed	Total people affected	Damage (,000 US\$)
Drought	Drought	1	–	–	–
Earthquake (seismic activity)	Earthquake (ground shaking)	5	114	353,577	12,234
Epidemic	Bacterial infectious diseases	4	85	4,073	–
	Viral infectious diseases	2	770	130,717	–
Flood	Unspecified	2	27	15,100	–
	Flash floods	22	205	3,276,730	266,484
	General floods	37	474	10,072,924	148,965
	Storm surge/coastal floods	2	11	50,034	2,520
Mass movement wet	Avalanches	1	6	1,200	–
	Landslides	10	1285	20,340	2,281
Storm	Local storms	2	7	4,604	5
	Tropical cyclones	76	9876	51,699,145	4,380,730
Volcano	Volcanic eruptions	6	–	153,114	–
	TOTALS	170		65,781,558	4,890,936.6

Created on: Apr-23-2013. Data version: v12.07  
Source: EM-DAT: The OFDA/CRED International Disaster Database.

## Annex 2. Poverty comparisons in the Philippines

Simple income measures such as that of the World Bank's US\$2 per day place the number of people in the Philippines living below the poverty line at higher than 40%, not far off double that of the Government's own National Poverty Line. The Multidimensional Poverty Index (which accounts for 10 indicators across three dimensions of education, health and standard of living) places the country's poverty rate at considerably lower than comparison models, at just 13.4%.

Figure 9. Comparative poverty measures in the Philippines



Source: Oxford Poverty and Human Development Initiative (2012).

## Annex 3. Successes of DRRM<sup>48</sup>

### I. Disaster prevention and mitigation

- Conduct of risk assessments in various areas in the country
- Development and establishment of several early warning systems
- Development of tools on risk assessment
- Increasing involvement of communities and local government units (LGUs) in disaster risk management
- Development of DRRM mainstreaming tools into the national and sub-national planning systems
- National institutional and legal frameworks in DRRM
- Presence of functional multi-sectoral platforms
- Resource allocation

### II. Disaster preparedness

- Conduct of DRRM various research work
- Conduct of multi-stakeholders dialogues
- Conduct of various capacity building activities
- Development and regular review of contingency plans
- Development of information, education and communication (IEC) materials
- Development of information and database generation
- Inclusion of DRRM into school curricula (especially in basic education)
- Existence of procedures on disaster communication

### III. Disaster response

- Established institutional mechanisms for disaster response operations
- Improved skills in search, rescue and retrieval operations

### IV. Disaster rehabilitation and recovery

- Mainstreaming of DRR in social, economic, and human settlements development plans
- Conduct of post disaster assessments
- Integration of DRR into post-disaster recovery and rehabilitation processes
- Incorporating DRR elements in planning and management of human settlements

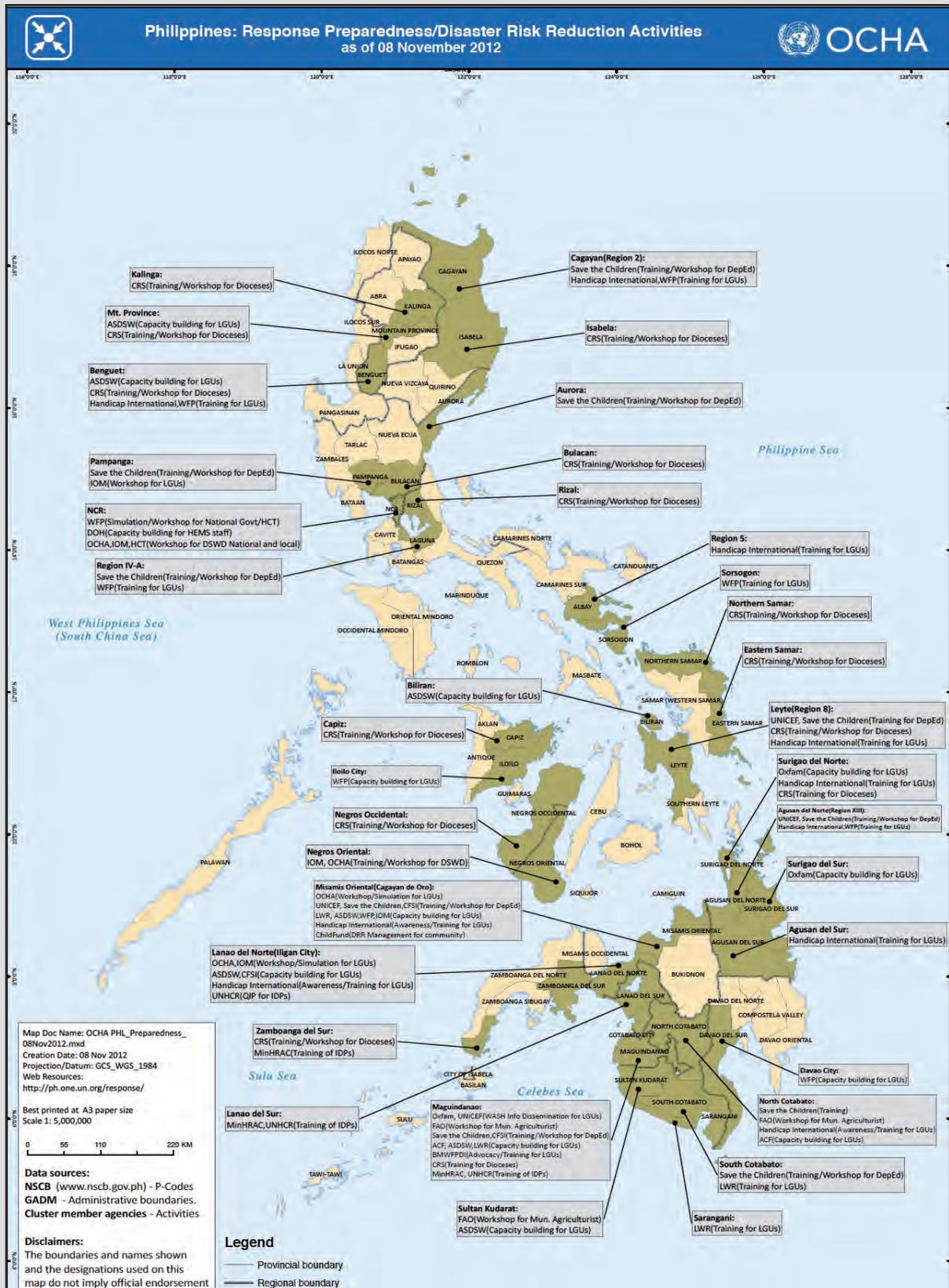
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<sup>48</sup> These come from the NDRRMP, Page 12.

## Annex 4. Revised emergency preparedness financing matrix

Categories of emergency preparedness		Explanatory notes
Institutional and legislative frameworks	Institutional and legislative frameworks	Legal instruments that describe and put into law emergency preparedness
	National plans of action, national platforms	National structures and plans for preparedness
	National crisis management authorities (NCMAs)	Creation of NCMA
Response coordination capacity (human resources, equipment, processes/administration)	National coordination	E.g. OCD, DiLG, DSWD
	Sub-national coordination	Local government units
	International coordination	E.g. specific cluster/sector coordination
	Human resource surge	Roster of staff available to be deployed in event of crises.
Information analysis and management	Hazard/risk analysis and mapping	Analysis of all risks.
	Early warning systems	Dissemination of risk information, down to community level, before crises.
	Crisis information management and communication	Information management during and after crises
Preparedness implementation (human resources, equipment, training)	Contingency planning	
	Simulations and drills	
	Training for response	
	Emergency services, search and rescue	
	Stockpiling and pre-positioning	

## Annex 5. OCHA's who, what and where for response preparedness/DRR



## Annex 6. Further charts on emergency preparedness financing

Figure 10. Emergency preparedness financing where emergency preparedness activities are sole objective (Philippines)

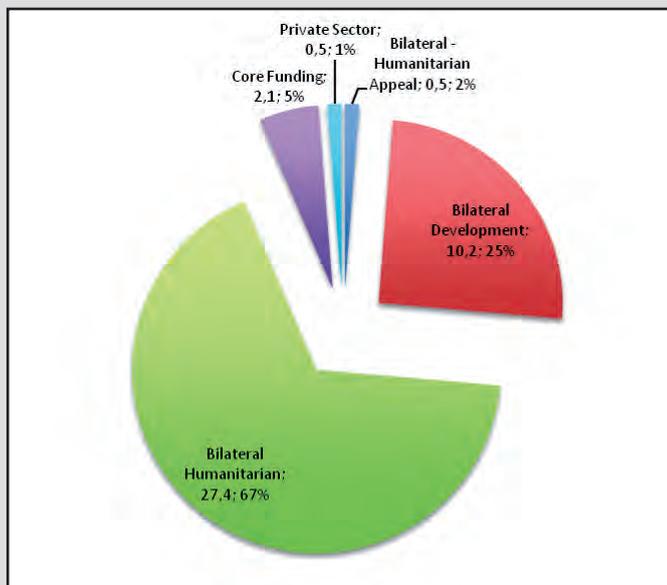
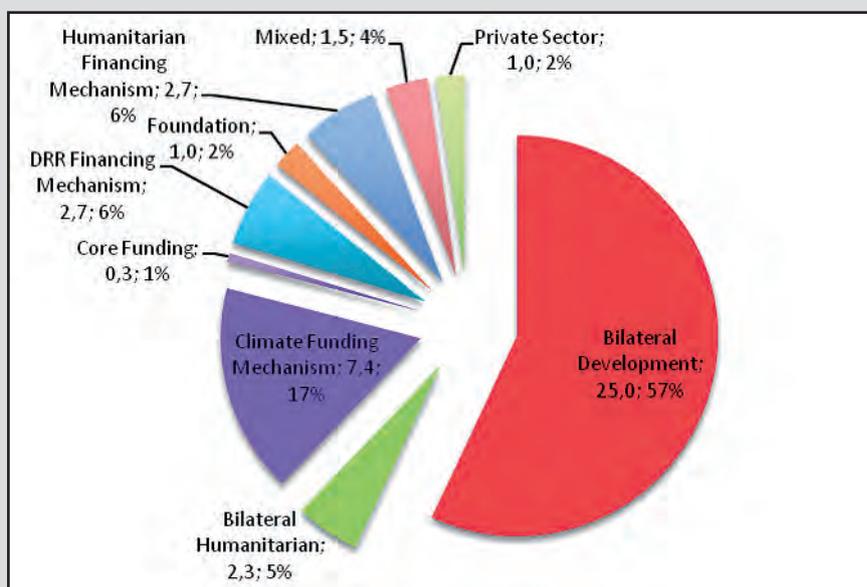


Figure 11. Emergency preparedness financing, where emergency preparedness activities are undertaken as part of larger body of work (Philippines)



## Annex 7. Emergency preparedness database for the Philippines (volume of funds in US\$)

Donor	Project title	Implementing agency	Volume of funds	Project dates	Source of funding	Source of funding type	Emergency preparedness activity	Fully or partially emergency prep.
Germany	Supporting the Philippine Climate Change Commission in implementing a national climate strategy	Climate Change Commission	3.8	2012 ongoing	German International Climate Initiative	Climate funding mechanism	Institutional and legislative frameworks	Partial
Germany	Adapting to Climate Change and Conserving Biological Diversity	DENR	3.6	2010 ongoing	German International Climate Initiative	Climate funding mechanism	Preparedness implementation (wide-ranging)	Partial
Japan	Disaster Risk Reduction and Management Capacity Enhancement Project	JICA, OCD	3.8	2012 ongoing		Bilateral development	Response coordination capacity	Partial
Japan	Programme for Improvement of Natural Disaster Capabilities	PAGASA, DPWH	15.4	2010 ongoing		Bilateral development	Early warning, contingency planning	Partial
Japan	Improvement of Equipment for Disaster Risk Management	JICA, PHIVOLCS, DPWH	10.2	2012 ongoing		Bilateral development	Equipment	Full
AusAID	Supporting Disaster Response and Coordination for Vulnerable Groups in the Philippines	UN OCHA	3.1	2013–2015	Country Programme Fund	Bilateral humanitarian	International coordination, information management	Full
AusAID	BRACE Program – Risk Analysis Project	Geoscience Australia, CSCAND agencies (MGB, NAMRIA, PAGASA, PHIVOLCS, OCD)	5.7	2010–2013	Country Programme Fund	Bilateral humanitarian	Hazard/risk analysis	Full
AusAID	GMMA READY Project – covers multi-hazard mapping, vulnerability assessment, DRM mainstreaming, early warning systems, contingency planning	UNDP, CSCAND agencies (MGB, NAMRIA, PAGASA, PHIVOLCS, OCD), HLURB, MMDA	2.6	2011–2014	Country Programme Fund	Bilateral humanitarian	Hazard/ risk analysis, early warning, contingency planning	Full
AusAID	Project Climate Twin Phoenix (in Northern Mindanao and Davao Regions) – covers multi-hazard mapping, vulnerability assessment, DRR-CCA mainstreaming, early warning systems, contingency planning	UNDP, CCC, HLURB, CSCAND agencies (MGB, NAMRIA, PAGASA, PHIVOLCS, OCD)	2.5	2012–2014	Country Programme Fund	Bilateral humanitarian	Hazard/ risk analysis, early warning, contingency planning	Full
AusAID	Technical assistance on Disaster Response and Preparedness	RedR Australia, NDRRMC-OCD	0.6	2012–2014	Country Programme Fund	Bilateral humanitarian	Training for response	Full

Donor	Project title	Implementing agency	Volume of funds	Project dates	Source of funding	Source of funding type	Emergency preparedness activity	Fully or partially emergency prep.
AusAID	Stockpiling of food and NFIs	WFP, UNFPA, PRC, WFP, UNFPA, UNICEF	2.6	2013 ongoing	Country Programme Fund	Bilateral humanitarian	Stockpiling	Full
New Zealand	Integrating disaster risk reduction and climate change adaptation in local development planning and decision-making processes	UNDP and NEDA	1.1	2011–2013	ASEAN Regional Programme	Bilateral development	Sub-national coordination	Partial
USAID	WFP led project to build the capacity of provincial and municipal units on DRR	WFP, local government units, local civil society organizations, local academic institutions	8.0	2011 ongoing	USAID/OFDA	Bilateral humanitarian	Information analysis and management, preparedness implementation	Full
AusAID	WFP led project to build the capacity of provincial and municipal units on DRR	WFP, local government units, local civil society organizations, local academic institutions	1.0	2012 ongoing	Country Programme Fund	Bilateral humanitarian	Information analysis and management, preparedness implementation	Full
Yum	WFP led project to build the capacity of provincial and municipal units on DRR	WFP, local government units, local civil society organizations, local academic institutions	0.4	2012 ongoing		Private sector	Information analysis and management, preparedness implementation	Full
European Community	Local flood early warning system	GTZ, pilot provincial government and local government units in regions IVB, V, VII and CARAGA, PAGASA, and media in selected provinces and municipalities in regions VIII, VI, V, IVB and II.	0.7908	2012–2013	DIPECHO	Bilateral humanitarian	Early warning	Full
Germany	Environment and Rural Development Program	GTZ, Pilot LGUs in Region VIII, PAGASA	4.0	2010 ongoing	German Federal Ministry for Economic Cooperation and Development (BMZ)	Bilateral development	Preparedness implementation (wide-ranging)	Partial
Plan International	Range of child-focused preparedness activities	Many, especially PLGU, MLGU/BLGU, OCD, PNRC	0.3	2012 ongoing		Core funding	Sector specific	Partial
Mixed Donors	Range of child-focused preparedness activities	Many, including DepEd/LGU/MDRRMC/ Office of Civil Defence RO8/DOH/PBSP	1.5	2010 ongoing		Mixed	Sector specific	Partial

Donor	Project title	Implementing agency	Volume of funds	Project dates	Source of funding	Source of funding type	Emergency preparedness activity	Fully or partially emergency prep.
European Community	Scale up, Build up: Strengthening Local Alliances and Advocacy and Empowering Champions on Disaster Risk Reduction (SUBU)	ACF led consortium with OXFAM, CARE, Christian Aid, Plan International and Handicap International	2.0	2012–2013	DIPECHO	Bilateral humanitarian	Preparedness implementation (wide-ranging)	Partial
Japan	Assessments of Climate Change Impacts and Mapping of Vulnerability to Food Insecurity under Climate Change to Strengthen Household Food Security with Livelihoods Adaptation Approaches	FAO, Department of Agriculture	0.8	2011–2014		Bilateral development	Hazard/risk analysis	Partial
European Community	Enhancing Capacities for Disaster Risk Reduction in Agriculture in Cambodia and the Philippines	FAO, Department of Agriculture	0.3	2012–2013	ECHO	Bilateral humanitarian	Sector specific	Partial
UNFPA	UNFPA core resources for capacity building of partners on the Minimum Initial Service Package for Reproductive Health (MISP-RH) and prepositioning of kits/funding	UNFPA, DoH	0.2	2013 ongoing		Core funding	Sector specific	Full
AusAID	Non-core (or multi-bi) resources for capacity building of partners on the Minimum Initial Service Package for Reproductive Health (MISP-RH) and prepositioning of kits/funding	UNFPA, DoH	0.5	2013 ongoing	Country Programme Fund	Bilateral humanitarian	Sector specific	Full
UNIQLO	Building a Healthy, Safe and Protective School-Community System	UNICEF, DepEd, local govt units, NGOs	1	2013–2016		Private sector	Sector specific	Partial
MA Cargill Foundation	Community-based Child Centred Disaster Risk Reduction	UNICEF, LGUs, DepEd, OCD, DILG, NGOs	1	2013–2015		Foundation	Sector specific	Partial
UNICEF	Various programmes on response	UNICEF, LGUs	0.1	2013-2015		Core funding	Training for response	Full
ICRC	Mindanao Preparedness (including extensions for Bopha support)	ICRC, PRC	1.7	2013 ongoing		Core funding	Preparedness implementation (wide-ranging)	Full

Donor	Project title	Implementing agency	Volume of funds	Project dates	Source of funding	Source of funding type	Emergency preparedness activity	Fully or partially emergency prep.
CERF	Assistance to IDPs, Returnees and other Food-Insecure Households in Conflict-affected Areas of Central Mindanao, and Strengthening National Capacity on Natural Disaster Preparedness and response.	WFP, LGUs	0.9	2013 ongoing		Humanitarian financing mechanism	Response coordination capacity	Partial
Spain	Strengthening Humanitarian Coordination and Advocacy in the Philippines	UN OCHA	0.4	2013 ongoing		Bilateral - humanitarian appeal	International coordination, information management	Full
USAID	Strengthening Humanitarian Coordination and Advocacy in the Philippines	UN OCHA	0.1	2013 ongoing		Bilateral - humanitarian appeal	International coordination, information management	Full
GFDRR	Supporting the Philippine DRRM Agenda	OCD	2.7	2013 ongoing		DRR financing mechanism	Institutional and legislative frameworks, national coordination	Partial
CERF	Time-critical Debris Disposal Management in Areas Affected by Typhoon Bopha	UNDP	1.8	2012–2013	CERF	Humanitarian financing mechanism	National coordination, sub-national coordination	Partial
IFRC	Country-Wide Contingency Planning	IFRC, Philippines Red Cross	0.1	2013 ongoing		Core funding	Contingency planning	Full
Philippine Private Sector	Noah's Ark and other community preparedness	CNDR	0.1	2012 ongoing		Private sector	Community preparedness, contingency planning	Full

# Case study: financing of emergency preparedness in Myanmar

Katie Peters

## Executive summary

*Sittwe, Myanmar: 'Myanmar's victims of sectarian strife were spared the full force of Cyclone Mahasen, but many are now returning to flimsy tents in flood-prone camps with the monsoon just weeks away.'*  
(The Times of India, 20 May 2013)

Emergency preparedness in Myanmar exists in discrete, concentrated areas but its coverage, both geographical and sectorial, falls far behind need.<sup>1</sup> Most critically, there is no coherent and consistent approach to emergency preparedness being adopted in all humanitarian and development action. Despite the evident need, both in terms of the country's risk profile and to improve humanitarian action, the lack of focus on emergency preparedness is in part because of the challenging operational environment in which agencies work, related to the restrictions on access and spending within the country.

In this context, international agencies have focused on disaster relief and peace-building efforts. The operational restrictions in Myanmar (self-imposed, by home countries and by the Government of Myanmar (GoM)) have limited the viability of establishing national systems for emergency preparedness and the scope of preparedness activities to cover the areas most at risk. These constraints notwithstanding, there have been some noteworthy efforts, such as the inter-agency contingency plans spearheaded by the United Nations (UN), and a national policy for disaster risk reduction (DRR) by the GoM.

Most international aid for Myanmar between 2001 and 2012 was for humanitarian relief. This increased from US\$1.5 million in 2001 to US\$43.5 million in 2012 and peaked at US\$620 million in 2008 (related to Cyclone Nargis relief and recovery). The major bilateral donors to Myanmar between 2008 and 2010 were (in order of size of contribution) the United Kingdom (UK), the United States of America (US), Australia, Japan and Norway. The top multilateral donors were the European Union (EU) institutions, the Global Fund, the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP) and the United Nations Population Fund (UNFPA).

Despite the long history of natural catastrophes in Myanmar, the most frequently cited start from Cyclone Nargis in 2008, which was a turning point in attracting international attention from the media, donors and aid agencies. Since then, disaster events that have prompted a significant level of international funding include floods in June 2010, Cyclone Giri in October 2010, an earthquake in March 2011, flash floods in October 2011, and unrest in Rakhine and Kachin States throughout 2012–2013.

Preparing to respond to this complex risk environment is complicated by the broader political and economic conditions. Myanmar is undergoing rapid change. The country is opening up, sanctions are being lifted or revised and the need for preparedness is becoming self-evident in view of recent natural and conflict-related emergencies. Yet international support is overwhelmingly dominated by funds for humanitarian relief, from which minimal and insufficient amounts are allocated to risk-reduction or emergency preparedness activities. The disaster preparedness programme of the European Commission's Humanitarian Aid department (DIPECHO) is the primary donor for funding DRR in relation to natural hazards, under which emergency preparedness activities often fall. These funds are channelled to operational UN and non-governmental agencies. There is no equivalent approach to preparedness for conflict-related emergencies.

The working culture in Myanmar is characterised by the assumption that there will always be a 'next' disaster; the unknowns are where, when and how severe it will be. While those areas most at risk should be understood to the extent possible, the gaps and insufficiencies of the preparedness system means that national and international actors lag behind in their ability to be prepared to act when a crisis strikes. Simply transplanting the international funding architecture to Myanmar has meant that the obvious need to be better prepared to respond to disasters has not translated into financial support for preparedness activities. The piecemeal, project-based interventions leave gaps in the breath of preparedness activities undertaken and in their geographical focus and scale. A mapping of past and current DRR activities in Myanmar reveals a range of activities across all priorities of the Hyogo Framework for Action (HFA) and ASEAN Agreement on Disaster Management and Emergency Response (AADMER) – although the overall distribution and scope of these activities remain inadequate. Early warning, regional

<sup>1</sup> 'Myanmar' is used throughout this report, the UN designation. It is recognised that many actors use 'Burma'.

coordination and hazard/risk assessment appear to be the most common preparedness activities.

In 2011, the Office for the Coordination of Humanitarian Affairs (OCHA) undertook an online survey to assess the self-perceived level of awareness of preparedness for humanitarian response in Myanmar. The survey found that most respondents were familiar with their own agency's actions for preparedness but less so with GoM, NGO and inter-agency plans. Roughly half had participated in a contingency planning process, and half had recently taken part in a simulation. Overall, respondents considered that they had a medium to high level of preparedness, but were less familiar with the remit of other agencies or how to work effectively together. Thus there is a long way to go before the international community represents a coherent and consolidated approach to emergency preparedness.

There is a need for a fundamental shift in how preparedness is funded in Myanmar. This is an opportune moment to establish the foundations for developing a national system and society that are adequately prepared for the range of risks to which the country is exposed.

There are six main recommendations for improving financing for preparedness:

1. At present, elements of preparedness are pursued through small isolated interventions that do not address the need for system-wide investment in preparedness, and are not predictable. This may require a move away from using humanitarian responses as the main means to fund preparedness activities towards more predictable funding, whether as humanitarian or development assistance.
2. Preparedness activities, as with any interventions, should be funded on the basis of a solid understanding of risk and where appropriate, based on a multi-hazard risk assessment. Donors and other agencies should share information and coordinate their funding to ensure an effective distribution of resources across the range of risks to which Myanmar is exposed. A starting point for this is to work more collaboratively on initial assessments, such as multi-hazard risk assessments.
3. Agencies require core funding to reflect the 'big P, little p' (see later section) notion of preparedness and its system-wide relevance. Activities spanning this continuum require sustained support through multi-year funding or predictable partnership investments.
4. One option is to establish a multi-donor pooled fund with contributions from humanitarian and development agencies. This should be done with the direct intention of having a financing mechanism acting as a catalyst for more coherent action on the ground.

With an emergency preparedness remit such a fund could span the 'big P, little p' range of activities and be based on a national strategy. This would require appropriate weighting of preparedness interventions to respond to short term need as well as activities over the medium to long term. The latter should be aligned with GoM priorities listed under the Myanmar Action Plan for Disaster Risk Reduction (MAPDRR).

5. It is recommended that there is a distinction between the fund manager and recipients of any such pooled funding; the funds could be managed at the regional level. Donors would be encouraged to make multi-year contributions in order to ensure a predictable level of support to the relevant agencies.
6. Funding for emergency preparedness must be accessible to the full range of parties involved in establishing a sustainable national preparedness system, i.e. local, national and international NGOs, the private sector, UN agencies, government ministries and departments, and other bodies. Where relevant and viable, a partnership approach should be encouraged (between national and international actors) to help build national capacity.

Of course, this is not all about funding. Many of the challenges to achieving optimal preparedness are of a political nature, i.e. institutional, governance, cultural. At present actors don't know how much they need to be 'prepared'. The ideal starting point would be to work from a shared risk analysis, to know and understand what resources are available, and what level of risk stakeholders are willing to accept. At present, this doesn't exist.

Something has to change. The financing architecture shapes – more than some would like to believe – the nature of work in-country. Addressing the funding challenges will make it possible to improve preparedness, which will ultimately lead to a better capacity to respond.

### A word of caution

There have been significant efforts to track international aid flows to Myanmar, e.g. the Financial Tracking Service and Myanmar Information Management Unit (MIMU) websites. However, donors report differently on their previous and planned funding and activities; and we found no evidence of any donors tracking expenditure on emergency preparedness as a discrete sector or category. The only way to gather such information is through primary research and manual coding.

In-country research for this report was conducted in April 2013, in Yangon, Nay Pai Taw and Bangkok. This was complemented by telephone interviews and a review of secondary data. Attempts to verify the accuracy and

completeness of the information presented here include triangulating the data and sharing the draft report with all the interviewees (see Annex 1).

## Country context and crisis history

### Political setting

On 2<sup>nd</sup> March 1962, the Burmese army led by General Ne Win took power after a military coup. In 1974 the military regime became the Burmese Socialist Programme Party (BSPP), which stayed in power until 1988. During this period, the country's economic and social conditions deteriorated, and in 1987 the UN placed Myanmar in the 'least developed country' (LDC) category.<sup>2</sup> International organisations reported a growing number of ethnic conflicts and political unrest. Tensions reached a peak during the student-led anti-government protest in 1988 when thousands of people were killed and many more forced to flee.

On 18 September 1988, General Saw Maung took power and renamed the ruling regime the State Law and Order Restoration Council (SLORC). In 1989 the country's name changed from Burma to Myanmar. A multi-party general election was held in May 1990 and, despite the widely regarded opposition victory, the National League for Democracy (NLD), the military refused to recognise the election results. SLORC became the State Peace and Development Council (SPDC) in 1997 and stayed in power until the 2010 elections.

Throughout the period of military rule, national and international organisations such as the National Democratic Institute (NDI) and Amnesty International as well as many foreign governments recognised, reported and condemned a growing number of human rights violations, and a lack of freedom, civil liberties and political rights. In addition, the country was marred by oppression, high vulnerability and poor social, economic and political conditions. Freedom House classifies Myanmar as 'not free' and often ranks it last for political rights and civil liberties. Moreover, in the 2012 Corruption Perception Index, Transparency International ranked Myanmar at 172 out of 176 countries surveyed.<sup>3</sup>

In 2010, elections were held for the first time since 1990 and brought to power the former Prime Minister Thein Sein as the head of a civilian government. The electoral process was widely criticised by national and international observers including the United Nations Special Rapporteur on Human Rights in Myanmar, the European Parliament and Kurt Campbell, US Assistant Secretary of

State for East Asian and Pacific Affairs.<sup>4</sup> The NDI argues that the 2010 electoral framework was fundamentally undemocratic since the new election laws did not comply with international standards, civil society and opposition leaders were excluded from the process of drafting the constitution, and political prisoners or regime opponents were prohibited from voting.<sup>5</sup>

Such concerns notwithstanding, the country has seen a marked change. The new government has initiated political and economic reforms towards liberalisation. It has shown a strong commitment to implementing economic reforms to maintain macroeconomic stability. It has established the basis for a market economy and taken steps to achieve inclusive and sustainable economic growth.<sup>6</sup> There are also political reforms aimed at releasing political prisoners, negotiating peace with armed ethnic groups, and legislation to provide greater freedom of expression and assembly, labour rights and political participation.<sup>7</sup> The release of 651 political prisoners in January 2012, including many high-profile dissidents, is understood as a good example of the GoM's intention to improve political conditions.<sup>8</sup> However, a recent UN investigator's report (UNGA, 2013) states that despite progress, shortcomings remain and must be addressed. The report documented that 'there remains a large gap between reform at the top and implementation on the ground'.<sup>9</sup> Moreover, preliminary figures suggest that over the period 2009–2010 the GoM allocated more than 23% of total expenditure on defence and less than 11% on social spending.

### Sanctions

Myanmar's political history and its dire record on human rights, freedom and corruption have led to international isolation and condemnation. In the mid-1990s several countries including Australia, Canada, the EU,<sup>10</sup> Norway, Switzerland and the US<sup>11</sup> imposed economic, financial and travel sanctions on the country.<sup>12</sup> The sanctions against Myanmar were strengthened several times during the period of military rule and were coupled with restrictions on imports and financial transactions as well as freezing the assets of some financial institutions.

<sup>4</sup> [http://www.ndi.org/files/NDI\\_Burma\\_Elections\\_0810.pdf](http://www.ndi.org/files/NDI_Burma_Elections_0810.pdf)

<sup>5</sup> [http://www.ndi.org/files/NDI\\_Burma\\_Elections\\_0810.pdf](http://www.ndi.org/files/NDI_Burma_Elections_0810.pdf)

<sup>6</sup> <http://www.clubdeparis.org/sections/actualites/myanmar-20130128>

<sup>7</sup> [http://www.dfat.gov.au/geo/myanmar/myanmar\\_brief.html](http://www.dfat.gov.au/geo/myanmar/myanmar_brief.html)

<sup>8</sup> [http://www.dfat.gov.au/geo/myanmar/myanmar\\_brief.html](http://www.dfat.gov.au/geo/myanmar/myanmar_brief.html)

<sup>9</sup> <http://www.nytimes.com/2013/03/08/world/asia/myanmar-reforms-could-falter-un-investigator-says.html?ref=world&r=1&>

<sup>10</sup> In the case of the EU, the sanction regime was enshrined in the Council Common Position of Restrictive Measures against Burma/Myanmar and was legally binding for all Member States.

<sup>11</sup> The USA adopted an arms embargo in 1993. This was widened four years later to include all new investments.

<sup>12</sup> In 2006 Canada imposed a ban on exports from Myanmar, and Australia and New Zealand maintained a ban on visas for the country's military figures.

<sup>2</sup> <http://burmacentredelhi.org/about-burma/background-of-burma.html>

<sup>3</sup> <http://www.transparency.org/country#MMR>

In 1996, the EU suspended all non-humanitarian EU development programmes in Myanmar. During military rule, EU and US aid to Myanmar went primarily on assisting internally displaced persons (IDPs), migrants and refugees. Despite being one of the poorest countries in South East Asia, with one of the lowest social development indicators, Myanmar receives less aid per person than most of the countries in the region<sup>13</sup> and less than many of the other poorest countries in the world.<sup>14</sup>

Following the political and economic reforms implemented by the civilian government after the 2010 elections, the international community has eased or suspended its sanctions against Myanmar (except the arms embargo) and has shown a commitment to increase foreign aid. For example, in 2012, Australia's then Foreign Minister Senator Bob Carr announced the country's wish to double bilateral aid to Myanmar by 2015 to reach US\$100 million a year.<sup>15</sup>

### Current aid framework

International aid to Myanmar has more than doubled during the last decade, from US\$177.6 million in 2001 to US\$376 million in 2011.<sup>16</sup> International aid peaked after Nargis Cyclone in 2008, reaching approximately US\$529.5 million (later estimates show this peaking as high as US\$620 million).<sup>17</sup> In 2011, bilateral donors provided 74% of all Official Development Assistance (ODA). In 2010–2011 the largest individual donors were the UK, followed by the EU institutions, Japan, Australia and the US. Between 2008 and 2010, humanitarian aid accounted for more than 45% of all international aid to Myanmar, which represents on average US\$189.86 million against US\$77.94 million for the health and population sector, US\$29.01 million for the education sector, US\$44.16 million for the other social sectors and US\$15.54 million for cross-cutting issues.

Myanmar has received funding from the Central Emergency Response Fund (CERF), whose mandate is to improve the response to humanitarian crisis triggered by natural disasters and conflicts. The humanitarian fund has delivered aid to Myanmar each year since 2006 through one or both of its Rapid Response (RR) and Underfunded Emergencies (UFE) provisions. A total of US\$71,133,686 has been allocated to Myanmar since 2006, with peaks in 2008 (US\$28,437,349) after Cyclone

Nargis and in 2010 (US\$12,455,835) in response to Cyclone Giri and widespread flooding particularly in Rakhine State.<sup>18</sup> However, there was minimal evidence of CERF funding for preparedness, apart from relatively minor funding for health sector preparedness through the United Nations Population Fund (discussed later).

Another source of aid to Myanmar is the multi-donor pooled fund known as the Emergency Response Fund (ERF), set up in 2007. Since its establishment in Myanmar, the ERF has allocated US\$8.2 million to national and international NGOs working in conflict-affected areas and with IDPs.<sup>19</sup> On investigation, it does not appear that any projects funded include emergency preparedness components. In 2012, for example, the total funding was US\$1.2 million, all for emergency response.

In responding to a crisis in Myanmar, there are different processes for generating financial assistance. Agencies can launch their own emergency appeals but are requested to keep close contact with the Humanitarian Country Team (HCT) in order to avoid duplication and overlap. Collaboration can also be enhanced through collective appeals which have been put in place to mobilise resources. For example, in response to crises such as Cyclone Nargis in 2008 and the violence in Rakhine in 2012, immediate appeals were launched – the former a formal flash appeal and the latter an appeal organised by the UN, but not a formal part of the Consolidated Appeal Process (CAP). Perhaps surprisingly (in comparison with evidence from other flash appeals), both appeals were used to articulate emergency preparedness, albeit in only a few projects. OCHA's Financial Tracking Service (FTS) reports that in 2008 two projects that had preparedness components were actually overfunded: a Merlin health sector 'DRR and preparedness' project for US\$4.2 million and a US\$349,000 project for the NGO Malteser International for 'disaster preparedness in the cyclone-affected cyclone-affected region. The 2012 appeal project for emergency preparedness was also for Malteser International, directed to improved basic infrastructure and disaster preparedness for the population in Rakhine.

Despite the evident need – which prompts an appeal – funding is not always forthcoming. At one point in the Cyclone Nargis appeal the total amount requested to address the needs identified amounted to US\$481.8 million, of which US\$178 million was committed in response to an original flash appeal, leaving an unmet requirement of US\$303.6 million.<sup>20</sup>

<sup>13</sup> In 2012, Myanmar received only US\$8 per person in international assistance, compared with US\$68 for Laos, US\$49 for Cambodia and US\$39 for Vietnam ([http://www.dfat.gov.au/geo/myanmar/myanmar\\_brief.html](http://www.dfat.gov.au/geo/myanmar/myanmar_brief.html)).

<sup>14</sup> <http://www.usaid.gov/countries/eastasia/myanmar/Pages/home.aspx>

<sup>15</sup> <http://bobcarrblog.wordpress.com/2012/06/08/australia-to-double-aid-to-myanmar-by-2015/>

<sup>16</sup> <http://www.oecd.org/dac/stats/MMR.gif>

<sup>17</sup> Myanmar country profile Australian aid doc.

<sup>18</sup> CERF Summary Update.

<sup>19</sup> <http://www.unocha.org/roap/about-us/ocha-asia-and-pacific/myanmar/myanmar-emergency-response-fund>

<sup>20</sup> <http://reliefweb.int/report/myanmar/consolidated-appeals-process-cap-myanmar-cyclone-nargis-response-plan-2008-revised> as of July 2008

## Financial status and development banks

It is widely anticipated that if the economic reforms that started in 2011 continue and result in substantial progress, Myanmar's economic future could mirror that of its Asian neighbours. The Asian Development Bank (ADB) suggests that a 7%–8% annual expansion could be achieved, with per capita income tripling by 2030.<sup>21</sup>

Growth is only part of the picture. Myanmar's public external debt was recently established at US\$15.3 billion with arrears putting the country at risk of debt distress.<sup>22</sup> After a meeting between members of the Paris Club and the GoM, the Paris Club agreed on 25 January 2013 to cancel US\$5,925 million. Recognising the economic and social challenges facing the country, and the GoM's willingness to implement economic reforms, at the time of writing the representatives were set to recommend the 'exceptional treatment' of cancelling half of the total of arrears due to Paris Club creditors.<sup>23</sup>

The World Bank has not made any loans to Myanmar since 1987. Between 1956 and 1987 it supported 35 projects. There is one exception. The Food and Agriculture Organization of the United Nations (FAO) implemented an 'Avian Influenza Support' project financed by the EU Avian and Human Influenza trust fund (this closed in 2011). World Bank technical support staff have continued to engage with Myanmar, for example by participating in the Post-Nargis Joint Assessment, social impact monitoring in the affected areas and engaging with the Livelihoods and Food Security Trust Fund (LIFT).

The World Bank's Interim Strategy Note sets out the possibilities of future re-engagement with the country. These include a focus on supporting the government's efforts to transform institutions, building confidence in the reform process and preparing for a possible resumption of a full country programme. At the time of writing the World Bank was conducting missions in Myanmar; however it is clear that there is a long way to go before the systems and processes are in place that would allow in-country funding and financial investment from the Bank.

Similarly, the ADB has not approved any loans in Myanmar since 1986, but a resumption of engagement is anticipated with the development of an ADB roadmap in 2012.<sup>24</sup> This roadmap sets out a range of activities including the current interim country partnership strategy for 2012–2014, technical assistance and initial assessments of key economic sectors.

The extent of progress on aid and financial management will have significant bearing on Myanmar's engagement with international donors and development banks more broadly. In January 2013 the ADB supported a forum on aid management, as part of a broader set of activities aimed at developing a formal mechanism for aid management and donor coordination.<sup>25</sup> Given the transformation that is required within Myanmar in its economic and political institutions, ADB notes that '[s]timulating rural development and human capital development for the poor is vital to ensure that growth is inclusive'.

In support of this, 12 technical assistance projects have been approved since 2012, to the value of US\$5.39 million (of which US\$0.82 million is co-financing). The technical assistance aims to support capacity development, strengthening institutions and policy, as well as supporting the implementation of reforms. The overarching vision is that the ADB '...support the government's efforts to provide the foundation for a more inclusive economy through transformational changes to macroeconomic policy institutions, accelerating human capital development and initiating market-based incentives to stimulate rural development'.

## Conditions of poverty and vulnerability

The nationwide Integrated Household Living Conditions Assessment 2009–2010 (IHLCA, 2009–2010) shows 25% of Myanmar's population living below the poverty line and 10% living in extreme poverty without the resources to cover basic food needs. Chin State is identified as the poorest area of Myanmar with 73% of the population living in poverty, followed by Rakhine State, in which 44% of the population are 'poor'.<sup>26</sup>

UNDP household surveys also show that in 2010, 25% of the Myanmar population was living below the poverty line. According to the joint Crop and Food Supply Assessment Mission (CFSAM) of the FAO and World Food Programme (WFP), many areas are affected by severe and chronic food insecurity such as Northern Rakhine State, Chin, Kachin, Magway Division, and Northern and Eastern Shan. Furthermore, over 5 million people are food-insecure and thus highly vulnerable.

Factors compounding vulnerability, such as poverty and hunger, have direct effects on the level of risk since they render people less able to cope with, and recover from, shocks, stresses and hazards. As evidenced by the Asian Disaster Preparedness Centre (ADPC), the most poverty-stricken areas such as Irrawaddy Delta, Chin State, Rakhine State and Shan State, also face natural hazards including seasonal storms, floods and landslides. There

<sup>21</sup> <http://www.adb.org/countries/myanmar/main>

<sup>22</sup> <http://www.clubdeparis.org/sections/actualites/myanmar-20130128>

<sup>23</sup> <http://www.clubdeparis.org/sections/actualites/myanmar-20130128>

<sup>24</sup> <http://www.adb.org/publications/myanmar-fact-sheet?ref=countries/myanmar>

<sup>25</sup> <http://www.adb.org/sites/default/files/pub/2013/MYA.pdf>

<sup>26</sup> [http://www.mm.undp.org/ihlca/01\\_Poverty\\_Profile/](http://www.mm.undp.org/ihlca/01_Poverty_Profile/)

remains serious concern that future natural disasters could severely disrupt the already fragile socio-economic balance in place (SDC-ADPC, undated).

Environmental degradation is also generating vulnerability in Myanmar. The mismanagement and exploitation (leading to exhaustion) of the environmental and natural resources on which people's livelihoods depend heighten the level of vulnerability. The lack of law enforcement and regulations on the prevention of, protection from and reparation for the adverse impacts of unsustainable activities exacerbate this situation.

Moreover, climate change has a recognised impact on extreme natural events such as drought and floods, exemplified by the unusually heavy monsoon season in 2013 in Myanmar.<sup>27</sup> In the absence of efficient mitigation and adaptation measures such natural disasters will continue to undermine and destroy lives and livelihoods across the country (discussed further next).

## The risk context

### Natural hazards

Myanmar is considered the 'most at risk' country in Asia and the Pacific, according to OCHA's risk model.<sup>28</sup> The country has been highly prone to natural disasters and it is commonly understood that a damaging disaster will occur every couple of years. Myanmar is vulnerable to a wide range of natural disasters, which vary from one region to another. While fires, floods and earthquakes affect the whole country, coastal regions are additionally exposed to cyclones, storm surges and tsunamis. The central part of the country, which is located in an arid to semi-arid zone, is also highly prone to drought. Examples of the natural hazard-related disasters affecting the country are noted below:

- Since 2006 Myanmar has suffered five major cyclones: Cyclone Mala in 2006, Cyclone Akash in 2007, Cyclone Nargis in 2008, Cyclone Giri in 2010 and Cyclone Mahasen in 2013. Cyclone Nargis is said to be the 'worst natural disaster in the living memory of Myanmar' (MAPDRR, 2012), killing approximately 140,000 people in the Ayeyarwady Delta region and affecting the livelihoods of over 2.4 million people.
- Flooding is particularly common during the rainy season (May to October). Mountainous areas are prone to flash floods and landslides while the delta area is exposed to riverine floods. According to OCHA, since 2002, floods have affected more than 500,000 people (OCHA, undated a). The last major flood affected the whole country in August 2012 and severely affected

over 287,000 people, including the displacement of more than 86,000 individuals and destruction of at least 136,000 acres of farmland, houses, roads and bridges.

- Floods also increase the risk of waterborne disease. Dysentery, diarrhoea, typhoid fever and other diseases regularly affect and kill a large number of urban, rural and displaced populations each year.<sup>29</sup> Cholera and shigellosis are endemic in the region especially following a cyclone or flood.<sup>30</sup>
- Between 2002 and 2012 two major earthquakes measuring 6.8 on the Richter scale struck Myanmar, affecting more than 20,000 people. One earthquake hit Tachilek in Eastern Shan State in March 2011 while the second affected the northern part of Mandalay region in November 2012. Annex 2 illustrates the areas recently affected by natural disasters.
- Between 2000 and 2010, fires accounted for more than 70% of reported natural disasters, with storms accounting for 12% and floods 11% (MAPDRR, 2012). An average of 900 fires occur each year, resulting in casualties and damaged livelihoods. Wildfires affected 48,588 people in the past 30 years, with an average of 8 deaths per event.<sup>31</sup>

### Conflict and fragility

After 49 years of military rule, the 2010 elections brought a civilian government to power. The political transition characterised by political and economic liberalisation has raised hopes of a better future and of increased international support. The president's reform agenda includes a commitment to end decades of conflict with the country's dozens of ethnic insurgent groups. The GoM's peace initiative is widely seen to be the best chance for peace in 60 years.

Despite this, violence and conflict continue;<sup>32</sup> as a result of the breakdown of various ceasefire agreements, clashes between ceasefire groups and the military, and inter-community or inter-communal tensions. In June 2011, a 17-year-old ceasefire broke down and conflict was re-ignited between the Myanmar Army and the Kachin Independence Organization (KIO) and its allies (Arakan Army, All Burma Students' Democratic Front and the Ta'ang National Liberation Army). The continuing conflict in Kachin State and northern Shan State has severely affected hundreds of thousands civilians and substantially increased poverty, lawlessness and drug production.<sup>33</sup> According to OCHA's Humanitarian Bulletin of February

<sup>27</sup> <http://climateandsecurity.org/tag/myanmar/>

<sup>28</sup> <http://www.unocha.org/roap/about-us/about-ocha-roap/myanmar>

<sup>29</sup> <http://www.mm.undp.org/HDI/CDRT.html>

<sup>30</sup> [http://www.who.int/diseasecontrol\\_emergencies/MyanmarCycloneNargis090508.pdf](http://www.who.int/diseasecontrol_emergencies/MyanmarCycloneNargis090508.pdf)

<sup>31</sup> <http://www.preventionweb.net/english/countries/statistics/?cid=118>

<sup>32</sup> <http://www.mmpeacemonitor.org/#!/deciphering-myanmars-peace-process/ch2>

<sup>33</sup> <http://www.mmpeacemonitor.org/#!/deciphering-myanmars-peace-process/ch2>

2013 (OCHA, 2013), over 83,000 people have been displaced by conflict in these two regions.

People have fled to refugee camps. According to the Kachin Refugees' Relief Committee there are 19 refugee camps in China for Kachin war victims and more than 40 in Kachin State. In early 2012 Kachin refugee camps along the Sino-Burmese border experienced outbreaks of cholera owing to poor sanitation and sub-standard living conditions.<sup>34</sup>

In addition to the Kachin conflict, there have been recurrent clashes between the Myanmar Army and different armed groups – despite the ceasefire agreements. These include clashes in northern Karen State and eastern Bago Region between the Karen National Liberation Army and government troops, and in Shan State between the Shan State Army and the Myanmar Army.<sup>35</sup>

During the same period, Rakhine State experienced an inter-community conflict, which started in early June 2012 and flared up again in October 2012. As a result of this conflict more than 120,000 people were displaced according to OCHA's Humanitarian Bulletin (OCHA, 2013). In Mandalay region, inter-communal violence started over a local dispute in Meikhtila market, in which 43 were killed, 61 were injured and 12,846 people were displaced, in addition to the destruction of many properties and religious buildings.

The situation across the country, but particularly in contentious regions, is complicated and sensitive. Information about the details of events – or the numbers of those affected – are often incomplete and piecemeal. Overall it is understood that the data on the number of individuals affected by violence and conflict are regularly underestimated.

## Institutional architecture for emergency preparedness in the Government of Myanmar

### Legal and institutional arrangements

The arrangements for emergency preparedness and DRR have taken many forms over the past decade, with a plethora of committees being responsible for different elements of risk management across the country. Outlined below is a brief overview of that history.

A National Disaster Preparedness Central Committee (NDPCC) was set up in 2005. Its 37 members established a Standing Order on Natural Disaster Management in 2009, which defines the roles and responsibilities of each member ministry and the newly established disaster preparedness committees. The NDPCC and the Order guide the formation of committees and coordination mechanisms at various levels to facilitate disaster preparedness operations (SDC-ADPC, undated).

The Standing Order outlines four national-level measures through which a natural disaster response is managed. Each has a strong component of disaster preparedness. First, the National Committee for Natural Disaster Management, chaired by the Prime Minister, is required to meet biannually to, among other things, evaluate preparedness measures and approve early warning and communication systems. Second is the Inter-Ministerial Coordination Committee for Disaster Management, which is chaired by the Minister for Social Welfare, Relief and Resettlement. This committee is expected to monitor preparedness plans, coordinate and evaluate the activities of government agencies as well as review the preparedness status of the different ministries every six months. Third, an Advisory Committee for Natural Disaster Management is chaired by a specialist designated by the Prime Minister and includes members of civil society. This advisory committee provides technical advice, comments and recommendations on the implementation of disaster management activities across the country, including emergency preparedness. Finally, in January 2005 the Myanmar Natural Disaster Preparedness Committee was formed by the SPDC to predict, and be prepared to, respond to natural disasters.

The Standing Order also highlights the responsibility of each ministry to include a strong component of emergency preparedness in their activities and within their own sectorial interventions. Moreover, the Order announced the creation of Ministerial Committees for Natural Disaster Management (within each ministry), chaired by the respective minister and with the heads of departments as its members.

Recognising that preparedness activities need to reflect local conditions, the Standing Order announced the establishment of management committees, work committees and sub-committees at the state, division and grassroots levels.

Recent developments include the establishment, in April 2011, of the highest decision-making body for disaster management, the Myanmar Disaster Preparedness Agency (MDPA) chaired by the Union Minister for Social Welfare, Relief and Resettlement. The goal was to create a more functional successor of the NDPCC. The GoM has also set up an 11-member Management Working

<sup>34</sup> <http://reliefweb.int/report/myanmar/cholera-outbreak-kachin-refugee-camps>

<sup>35</sup> <http://www.mmpeacemonitor.org/#/deciphering-myanmars-peace-process/chz2>

Committee and 14 sub-committees in order to implement, supervise and coordinate the activities presented in the MDPA.

The MDPA has established various different advisory groups and committees. This includes the Myanmar Disaster Preparedness Advisory Group responsible for conducting research and providing technical advice, and the Myanmar National Search and Rescue Committee created in 2012 and chaired by the Minister for Home Affairs. The Relief and Resettlement Department (RRD) under the Ministry of Social Welfare, Relief and Resettlement (MSWRR) is the lead ministry responsible for DRR across the country. At the time of writing, among other things, RRD is in the process of creating a Disaster Management Centre.

### National policy and planning: the MAPDRR

At the national level, government structures for preparedness are articulated within the newly approved MAPDRR. This focuses on disasters related to natural hazards, but includes clear roles and lines of responsibility for preparedness (and risk reduction/management) activities. The overall responsibility of the MAPDRR lies with the RRD in the MSWRR, as well as within ministries that have a role in preparedness as it relates to their sector.

The MAPDRR forms the main GoM policy architecture for disaster risk management (DRM). The MAPDRR has 64 DRR projects which includes activities regarded as emergency preparedness (according to the definition used for this report), such as early warning. The MAPDRR was approved by central government without an adjoining budget or financing strategy. The RRD must therefore make proposals to central government to fund specific activities. At the time of writing the RRD had yet to make any such proposals. Similarly, other departments and ministries do not have funding specifically earmarked for activities detailed within the MAPDRR that come under their remit; so are required to allocate funds from their budget or submit a proposal to central government. For example, educating children on disaster preparedness comes under the Ministry of Education, who would need to allocate or seek funding to undertake these activities.

The Task Force that devised the MAPDRR and its four working groups have prioritised 21 of the 64 activities listed in the MAPDRR (MAPDRR Vol. II, undated). These 'priority projects' were identified as contributing towards Myanmar's commitments within the HFA and AADMER on the basis of five criteria: significance of the project for Myanmar; likely impact in terms of coverage; human and financial resources required; feasibility within the given timeframe; and willingness of lead and partner agencies (MAPDRR Vol. II, undated, pp. 2–3). For each priority a ministerial and departmental lead agency has been

identified, and a tentative budget, totalling 24,375 million kyat (see Annex 3) has been allocated. The cost of the preparedness components can be considered as the total of components I–VII equal to 6770 million kyat.<sup>36</sup>

As of April 2013, implementation of activities outlined in the MAPDRR has been minimal. Those that have taken place are largely possible thanks to collaborative efforts between the RRD and international donors. For example, the Japanese bilateral agency (Japan International Cooperation Agency (JICA)) provided technical equipment to support the establishment of an emergency operation centre in the RRD in Nay Pyi Taw, and more than 58 cyclone shelters were built in various locations through GoM, UN and international NGO activities.

Although there has been progress on certain activities under the MAPDRR, without an implementation plan it is not surprising that the coordination of activities could be strengthened. Not least, to ensure better balance of the attention being given to the range of activities outlined in the MAPDRR.

### National plans of action

In recognition of the links between climate change and disaster risk, a number of initiatives are in progress to ensure that the needed institutional arrangements and frameworks are put into place. These include the development of an Initial National Communication, a National Sustainable Development Strategy, a National Biodiversity Strategy and Action Plan and a National Adaptation Programme of Action (NAPA).

The NAPA, which sets the priority activities for Myanmar to adapt to climate change, includes some elements of DRM and preparedness. For example, early warning systems are critical for preparedness and are one of the eight sectors/themes the GoM chose to be included in the NAPA.

The NAPA is framed around five strategies, three of which have direct links to preparedness: (1) create adaptive capacities for responding to the impacts of climate change focused on preparedness, monitoring, pilot projects and restoration of natural capital; (2) integrate climate change management, i.e. knowledge management, a database and tools, management preparedness and multilateral participation into national, regional and local level policies and plans; and (3) increase climate change research including assessing future climate risks and current vulnerability. The NAPA includes 32 priority projects aimed at building resilience to climate change, of which six are focused on preparedness and five include a strong

<sup>36</sup> Component V 'Mainstreaming of DRR into Development' is excluded since this strays into broader risk reduction.

component on preparedness. Most of the former are linked to risk, vulnerability assessments and early warning systems. The projects including an emergency component are found within public health, coastal zones and water resources.

Of the NAPA's proposed priority projects, level one priority includes a focus on early warning systems, agriculture and forests. The priorities for early warning are given in Table 1.

Following a final workshop in May 2013, the NAPA was being prepared for submission to the United Nations Framework Convention on Climate Change (UNFCCC). Under the leadership of the Department of Meteorology and Hydrology, the United Nations Environment Programme (UNEP) is the primary implementing agency, linking with a range of related sectors including agriculture, forestry, health, transport and energy.

There are likely to be synergies between the priorities and activities named in the NAPA and MAPDRR, especially since the latter includes climate change. Once the NAPA has been approved and the necessary international formalities have been completed, there is hope that international funding will enable Myanmar to operationalise the plan. Climate change funding should, to the extent possible, be used to compliment, bolster and address funding gaps relative to existing funding for disaster risk. Climate change financing should thus be used as a catalyst for improved coherence in funding. This should be treated with some caution, however, as funds relating to climate change have not been as forthcoming as initially anticipated by the international community.

Thus far, volumes of climate financing to Myanmar are relatively small – US\$8.9 million – of which US\$5.83 million is for adaptation. Tracking what may be

elements of emergency preparedness is a challenge. In Myanmar a small project for 'training on DRR utilising mobile/water knowledge' is the only likely emergency preparedness project, funded by Japan's Fast Start Finance.

Of the other main funds, the Least Developed Country Fund (LDCF) has supported just one programme – to develop the NAPA itself, and the Adaptation Fund has received one project from Myanmar but this has not been approved. At present, only 50% of Adaptation Fund financing can be channelled through multilateral agencies, and all available funds have already been programmed (Trujillo and Nakhoda, forthcoming).

### Regional and international agreements

At the regional level, as part of the Association of Southeast Asian Nations (ASEAN), Myanmar ratified the AADMER developed by ASEAN's Committee on Disaster Management after the 2004 Asian tsunami. As its name indicates, the AADMER promotes regional coordination and cooperation in the area of disaster management. A plan to implement the AADMER between 2010 and 2015 focuses on four components, which include disaster preparedness, though it does not appear that this has resulted in any action in Myanmar thus far.

At the international level, Myanmar has approved the HFA 2005–2015, which details the actions required to reduce disaster loss and risk. Two of the HFA's priority areas directly address preparedness, namely Priority Action 2 – to identify, assess and monitor disaster risks and enhance early warning – and Priority Action 5 on strengthening disaster preparedness for effective response at all levels. In addition, Priority Action 1 is about ensuring that DRR (including preparedness) is a national and local priority with a strong institutional basis for implementation. Priority Action 3 relates to the use of knowledge, innovation and education to build a culture of safety and resilience at all levels, which can be closely linked to community preparedness. As with the other signatories, Myanmar is requested to set up national platforms and to submit progress reports on the implementation of the HFA. Myanmar submitted a National Progress Report in 2011.

The HFA Progress Report (Aung, 2011) highlights the efforts made by the GoM towards integrating DRM and issues of emergency preparedness in policies and planning, allocating funds to these activities and strengthening the institutions to 'foster resilience at all levels'. It shows that DRR and emergency preparedness in Myanmar are 'included in the basic principles of national development planning and integrated into the sectoral development plans'. The report also stresses that roles and responsibilities of each ministry and department regarding DRR and emergency preparedness have

**Table 1. Early warning priority projects within the NAPA**

<b>Early warning systems</b>	<b>First priority:</b> Improving weather observation capacity through a mobile/deployable weather radar system for providing early warning systems against extreme weather events.
	<b>Second priority:</b> Developing a flood early warning system for reducing the vulnerability of local communities to climate change impacts.
	<b>Third priority:</b> Assessing the hydrological impact of climate change on river systems.
	<b>Fourth priority:</b> Developing a drought early warning system for reducing the vulnerability of local communities to climate change impacts.

Source: SDC-ADPC (undated: 58).

been clearly identified (as allocated through the Standing Orders for National Disaster Management), and that the government has worked to enhance local capacities. The report states that: two new early warning centres have been set up; early warning systems are already in place for cyclone, storm surge and floods; the GoM carried out tsunami exercises and drills as well as contingency planning simulation exercises in 2010; the fire brigade has established dedicated search and rescue teams at township and village level, and; a MIMU website has been created to facilitate the sharing of disaster-related information.

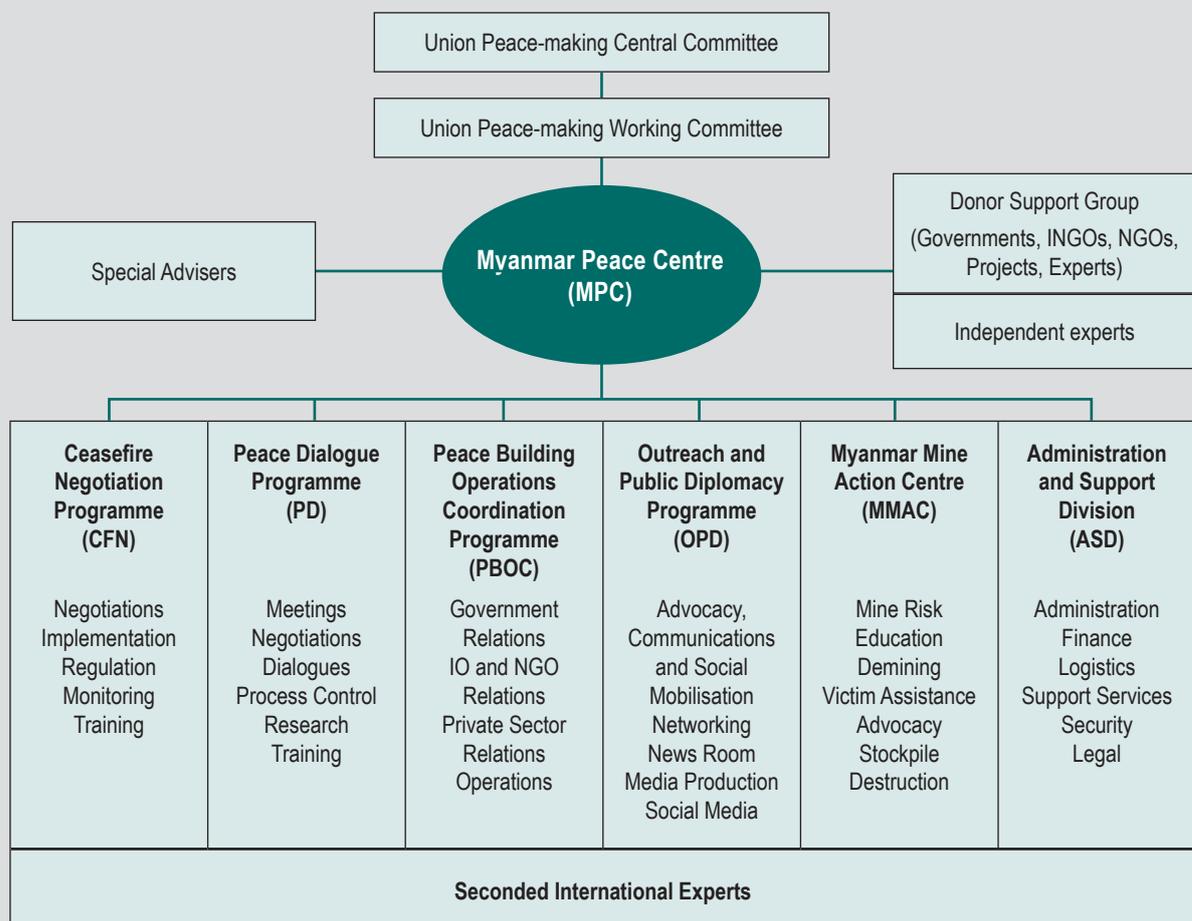
The report also mentions a number of challenges including the lack of comprehensive disaster management law, the limited capacities at all levels, as well as the inadequate financial and human resources devoted to DRR and emergency preparedness since Myanmar has no national contingency fund. The report also stresses the difficulty of institutionalising and implementing community-based DRR and emergency preparedness, and of achieving a balance between administration and financial decentralisation of these activities. Many remote places are still excluded from exercises, drills or training opportunities and have no access to information and early warning systems.

### Institutional arrangements for peace and conflict

In 2011 the GoM initiated a peace process. Within the GoM the peace architecture is composed of a Union Peace-making Central Committee, a Union Peace Working Committee, and the Myanmar Peace Centre (MPC). The 12-member Central Committee is chaired by the President, and the 52-member Working Committee is chaired by the Vice President. The MPC was established by Presidential Decree to serve as the Secretariat to the two committees and as the GoM's focal point for international donors, NGOs and civil society organisations on issues and programmes related to the peace process.

In January 2012, the GoM requested the Norwegian Government to facilitate and coordinate the delivery of assistance to conflict-affected communities in ceasefire areas, where there had been minimal or no prior access for aid agencies. The Norwegian Government established the Myanmar Peace Support Initiative to initiate a consultation process with a wide range of stakeholders – including donors, the government, non-state armed actors, political groups, civil society organisations (CSOs) and community-based organisations (CBOs) – to build

Figure 1. Government of Myanmar's peace architecture



confidence in the ceasefire arrangements and increase humanitarian space in the former conflict-affected areas. A pilot project in Kyauk-Gyi in eastern Bago Division was agreed through consultations with the GoM and the Karen National Union. The project, which has a budget of US\$160,000, aims not only to deliver aid but also to facilitate greater trust through interaction between local Myanmar Army commanders and the Karen National Union. The GoM has also asked the Myanmar Peace Support Initiative to facilitate a joint needs assessment with the Chin National Front, with the involvement of traditional mediators, and to establish a local ceasefire monitoring network.

Taking Rakhine State as an example, there is a clear articulation of sector-based responsibilities divided by government ministries and partner agencies (Table 2). Assistance to displaced communities affected by inter-communal violence in Rakhine State in June and September 2012 is coordinated at the Union-level by the Minister of Border Affairs, while sector meetings are chaired by relevant Rakhine State Ministers in Sittwe with the support of the international humanitarian community.

In March 2013, humanitarian agencies drew up a Rakhine State Preparedness/Contingency Plan focused on preparedness for the rainy season and the risk of renewed inter-communal violence. In the same month the GoM established an inter-ministerial body, the Peace and Development Central Committee for Rakhine, chaired by the Vice President, with the Minister of Border Affairs acting as deputy chair. An Emergency Coordination Cell has also been established in Sittwe at the Ministry of Border Affairs/Border Security office, to function as a focal point for operational coordination and information management. However, the functioning of the Emergency Coordination Cell has been delayed as it awaited decisions on resourcing by a special task force led by the Minister of Planning.

In an interview with the Prime Ministers Office – for this report – the renewed institutional architecture for violence and conflict related emergency preparedness was described: a Central Management Committee, chaired by the Minister of Home Affairs has been established to take on the role of emergency preparedness for man-made disasters. This is in addition to the MPC and Border Affairs/Rakhine mechanism. This can be understood as attempt to bridge the divide between natural and man-made emergencies (and the response to these). As the mechanism is in the process of being established it is too early to tell what relative impact this will have on improving preparedness for conflict.

## The international system and emergency preparedness

### United Nations

In May 2011, the United Nations Strategic Framework for Myanmar 2012–2015 set out a framework for coordinated assistance for the UN specialised agencies and initiatives in Myanmar (UN, 2011), which totalled more than 20 by 2012–2013 (ADPC, undated). Providing an estimated US\$150 million annually, the UN collectively is the country's largest provider of international humanitarian and development aid in the country.

Of the four strategic priorities, Strategic Priority 3 speaks directly to preparedness, to 'reduce the vulnerability to natural disasters and climate change' through three outcomes at three levels (national/policy, institutional/ system and community level):

- **Outcome 1:** Support and advocacy for the formalisation of national policies, strategies and action plans related to DRR and climate change adaptation.
- **Outcome 2:** Enhanced knowledge, information and systems to enable key stakeholders and

**Table 2. Rakhine State lead government and partner agencies per sector**

Sector	Government Lead Ministry	Partner Agencies
Health, Nutrition, WASH	Minister of Social Affairs/State Health Director	Action Contre la Faim, Consortium of Dutch NGOs (CDN), Merlin, Mercy Malaysia, Medecins Sans Frontieres, United Nations Population Fund, United Nations Children's Fund (UNICEF), World Health Organization (WHO)
Shelter	Minister of Forestry	CARE, Danish Refugee Council, Islamic Relief Worldwide, Myanmar Rice Federation, United Nations High Commissioner for Refugees (UNHCR)
Livelihoods	Minister of Agriculture	CDN, Danish Refugee Council, Solidarites International, Save the Children, United Nations Development Programme, CARE
General Coordination	Minister of Planning	All humanitarian agencies

decision-makers to have access to information to assess, forecast and monitor disaster and climate-induced risks.

- **Outcome 3:** Stronger capacities, awareness and resilience of communities, organisations and local authorities in high-risk locations, to respond to natural disasters and the effects of climate change.

Activities supported by the wider UN team include, at the national/policy level, the MAPDRR, Standing Order for Disaster Management and the comprehensive framework for DRR, the NDPC, and country commitments to international agreements such as the HFA, AADMER and UNFCCC. At the institutional/system level, the focus is on creating an information, data and monitoring system to facilitate more pre-emptive and responsive actions (UN, 2011: 21). This will be developed through an information and communication system, and a central database to support comprehensive assessments of risk and vulnerability. At the community level, awareness raising and resilience building will be supported through stakeholder networks.

Various preparedness activities have been carried out under the leadership of OCHA since the in-country office was established in 2008. The adoption of the Country-Level Integrated Preparedness Package for Emergency Response (CLIPPER), with support from Regional Office for Asia and Pacific (ROAP), looks set to continue a more strategic and comprehensive approach to preparedness (see Box 1).<sup>37</sup> It is important to note that this is aimed at efforts to improve the preparedness of the international community.

In 2009 a Contingency Plan was developed by the Inter-Agency Standing Committee (IASC-Myanmar) (ADCP, undated: 16). The plan drew on a shared analysis of potential emergencies, lessons from previous experience and 'common prioritisation of potential emergencies'. This prompted subsequent sector response plans and the creation of clusters for food, health, nutrition, water and sanitation, protection, logistics, emergency telecommunications, shelter, early recovery, education, agriculture and coordination (ADPC, undated: 16). These sector response plans are required to include DRR, gender and the environment as cross-cutting issues; with a focus on disasters arising from natural hazards, rather than violence or conflict.

The plan 'recognises the primary role and responsibility of the government to protect its citizens and acknowledges

<sup>37</sup> [http://pacificdisastermanagement.kemlu.go.id/Documents/Archives/Regional/Chairman\\_Summary\\_of\\_the\\_Meeting\\_of\\_the\\_International\\_Search\\_and\\_Rescue\\_Advisory\\_Group\\_Asia\\_Pacific\\_2011.pdf](http://pacificdisastermanagement.kemlu.go.id/Documents/Archives/Regional/Chairman_Summary_of_the_Meeting_of_the_International_Search_and_Rescue_Advisory_Group_Asia_Pacific_2011.pdf); <http://www.unocha.org/ocha2012-13/roap>; and <https://ochanet.unocha.org/p/Documents/DRR%20in%20Asia%20Identifying%20and%20Maximising%20Opportunities%20for%20ACTION,%2012Dec2011.pdf>

### Box 1. Country-Level Integrated Preparedness Package for Emergency Response (CLIPPER)

In its attempt to be more pro-active in offering preparedness support, OCHA has started to introduce a Country-Level Integrated Preparedness Package for Emergency Response (CLIPPER). According to its performance framework, at the end of 2013 this initiative will be introduced in 12 priority Asian countries – including Myanmar – by OCHA's Regional Office for Asia and Pacific (ROAP). This new approach aims to help the UN and other actors to respond effectively to disasters by increasing their own preparedness. Measures include: defining a clear division of labour among the various humanitarian agencies in a given country; encouraging the release of inter-agency assessments and funding documents; enhancing information management capacity; and ensuring that the international humanitarian community communicates and coordinates with others, including the government, private actors, civil society and military troops.

CLIPPER aims to support multi-disciplinary teams to coordinate effectively. Working with government, any resident coordinator/humanitarian coordinator and HCTs, OCHA will support preparedness activities in a more coherent and systematic manner, rather than the current ad hoc engagement. As part of the package, simulation exercises will help to enable participants to test their performance and skills against set benchmarks. This will gauge the effectiveness of preparedness activities and to identify improvements for follow-up action. It is anticipated that CLIPPER will make better use of resources and achieve measurable progress towards delivering improved preparedness at the country level, in a systematic manner.

The CLIPPER action plan in Myanmar consists of a range of activities including: a focus group and online survey on preparedness; a support package for preparedness and corresponding action plan; inter-agency contingency planning including training and simulation exercises; common rapid needs assessment including an inventory of needs; identification of focal points and agreed methodologies for assessing needs; support to Myanmar NGOs including increasing linkages with other actors and training; a government support workshop on humanitarian architecture and their links with international structures; a familiarisation course for civil–military coordination; simulation exercises and follow-up plan for addressing any remaining gaps.

In May 2013 the CLIPPER action plan in Myanmar was scheduled to be evaluated. In-country it is widely believed that although establishing the action plan is a welcome sign of further commitment to preparedness; in practice its implementation will be delayed by recurrent crises – unless there are significant increases in human and financial support committed to the plan which can be protected from being diverted to humanitarian response.

the existing institutional structures and protocols for disaster preparedness and response' (ADPC, undated; 16). It thus seeks to work in alignment with GoM efforts, being ready to work with the relevant ministries and departments in responding to disasters.

## Examples from the United Nations

Many UN agencies in Myanmar have made significant progress in relation to disaster preparedness. These include specific actions on the part of OCHA, UNDP, UN Habitat, UNPFA and UNICEF. Since establishing a country office in 2008 to facilitate and support the GoM-led response to areas affected by Cyclone Nargis, OCHA has taken a central role in emergency preparedness. In conjunction with the Resident Coordinator/Humanitarian Coordinator, Ministry of Social Welfare and RRD, there have been efforts to ensure 'a more systematic, inclusive and coordinated approach in disaster management and preparedness and response' (OCHA, undated b: 1). There has been a range of preparedness-focused activities led by OCHA (for a full list, see OCHA, undated b):

- In 2008: Training of Trainers on disaster management in conjunction with government officials from disaster-prone areas; revived the Inter-Agency Contingency Planning and incorporated lessons from Cyclone Nargis.
- In 2009: finalised the Myanmar Inter-Agency Contingency Plan (IACP); collaborated with ADPC to support the GoM-led MAPDRR; facilitated the ASEAN DRM course for high-level government officials; hosted disaster management workshops at township level; provided technical assistance in updating township preparedness plans.
- In 2010: simulation exercises in line with an updated IACP and as Chair of the Early Warning Taskforce organised a workshop to discuss ways to strengthen current systems for early warning; trained the first GoM official to be deployed in the UN Disaster Assessment and Coordination (UNDAC) teams; supported the development of manuals on preparedness for various hazards.
- In 2011: OCHA supported the GoM to review the Myanmar Disaster Preparedness Standing Order on Natural Disaster Management; provided technical support for various disaster management courses; updated contingency plans and undertook further simulation exercises; supported the development of the national disaster management law and strengthened early warning systems; facilitated the sharing of knowledge through various forums; and facilitated a stocktaking exercise. OCHA also began implementing the CLIPPER (see Box 1).
- In 2012: as part of the CLIPPER, OCHA developed an action plan for strengthening emergency preparedness; enhanced the needs assessment processes; provided training on humanitarian reform and architecture, tools

and services as well as contingency planning; and a undertook a simulation exercise to test response skills and capacities.

This broad suite of activities have brought together various components of the UN system and, where relevant, also linked with the respective government departments and agencies. Agencies have also sought to undertake preparedness activities that relate more specifically to their mandated target groups or sectorial expertise. For example, UNDP has undertaken significant work on the establishment of community-based disaster preparedness plans, as part of a broader engagement within the region under the Humanitarian Development Initiative (UNDP, undated). For agencies such as UNFPA, preparedness takes the form of specific activities that tie in with the aim to establish the necessary technical and physical capacities to improve service delivery. As an illustration, in 2012/2013 this included: Minimum Initial Service Package (MISP) training,<sup>38</sup> contingency planning, stockpiling of lifesaving reproductive health supplies, support to implementing partners (NGOs and associations), and providing services to vulnerable populations.

Other agencies such as UN Habitat are working to support the establishment of national institutional and legislative frameworks to support preparedness. This includes:

- Support in drafting disaster management rules and regulations in conjunction with the DRR Working Group, funded by multiple donors.
- Support to Myanmar to undertake HFA reporting through participation in various thematic working groups led by the RRD, supported by the Norwegian Ministry of Foreign Affairs.
- Support to national plans of action, specifically the formulation of the MAPDRR Task Force, through in-kind support funded by multiple donors.
- Support for coordination through the Shelter Cluster.

For many thematic agencies, preparedness is sectorial or issue-based. For instance, the 'prioritised operations' of the Office of the United Nations High Commissioner for Refugees (UNHCR) include aspects of preparedness for conflict, such as support to adopt national laws and policies regarding the protection of individuals; capacity building and awareness raising of international standards and administrative practices related to protection; and strengthening community leadership structures.

UNHCR's current preparedness activities include involvement with the inter-agency assessments of the inter-communal violence in Rakhine State, which formed the basis for the joint emergency response plans. In the south-east region it is equipped with mobile medical services and a network of trained health workers to

<sup>38</sup> <http://www.unfpa.org/public/global/pid/1058>

enhance coverage. In 2012 UNHCR revised its national contingency plan and supported the CLIPPER (see Box 1).

### Non-governmental organisations (NGOs)

In 2011, there were an estimated 455 community-based organisations (CBOs) and 60 international NGOs working in Myanmar (UN, 2011). The number of international NGOs rose significantly following Cyclone Nargis.

The DRR Working Group, initially a forum for international NGOs to share lessons and experiences post-Nargis, now supports information exchange on risk management more broadly. In addition, the group aims to offer NGOs a coordinated means to advocate for DRR to be appropriately included in Myanmar's national architecture. With some 50 agencies in the network, the Working Group seeks to link DRR activities largely funded from emergency response or relatively short-term funding, e.g. through a proportion dedicated to emergency preparedness or DIPECHO funds, with support for medium- to longer term measures to reduce risk (DRR Working Group interview).

The primary NGOs working on preparedness in Myanmar include: World Vision, CARE, Malteser, Oxfam and ADPC (based in Bangkok). Of particular note is ADPC's support to strengthening the policy frameworks for DRR in partnership with the GoM (see Box 2).

### International Federation of Red Cross and Red Crescent Societies (IFRC) and Myanmar Red Cross Society

Under the leadership of the Myanmar Red Cross Society (MRCS) there has been a substantial range of preparedness activities carried out. These include nationwide initiatives to promote community resilience. By adopting an integrated approach to preparedness, the IFRC and MRCS aims to take a longer-term perspective and includes aspects of sectorial preparedness and preparedness for secondary disasters within its outlook. The Red Cross/Red Crescent model relies heavily on volunteers, with a focus on community-based DRR at the township and headquarters level. While the approach is primarily at the community level, supporting rural and vulnerable communities in areas exposed to risk and hazards, a number of national preparedness activities have also been pursued. Examples include preparedness for response in the form of establishing 22 warehouses situated in various parts of the country, with capacity to store up to 12,000 family packs of non-food items.<sup>39</sup>

### Box 2. Preparedness strengthening by the Asian Disaster Preparedness Centre (ADPC)

ADPC has been working in support of DRR and preparedness in conjunction with the GoM. A project office was established in Myanmar in 2008, however ADPC was already working with the GoM prior to Cyclone Nargis. ADPC's projects include technical assistance, promotion of DRR and adaptation to climate change for its development partners, and capacity building for various ministries. For example, ADPC has supported the RRD, playing a pivotal role in the drafting of the MAPDRR and AADMER. ADPC has also supported the Department of Meteorology and Hydrology in early warning and dissemination. In conjunction with others such as the Myanmar Red Cross, ASEAN and CARE, ADPC is engaged in a number of initiatives including:

- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) Tsunami and Climate Trust Fund supported Coastal Hazards and Early Warning Systems programme.
- Norwegian-supported DRR Framework Project, which provides capacity building to seismology, meteorological and hydrological services.
- Technical services to the RRD on DRR capacity building entitled 'Strengthening Disaster Risk Reduction in Myanmar through Policy Dialogue, Technical Support and Capacity Building of Government and Civil Society Partners'.
- National training on mainstreaming disaster and climate risks.

In last 4–5 years some key ADPC projects have included:

- Supporting the development of the national DRR framework, the MAPDRR.
- National training course on mainstreaming DRR and climate change adaptation into development planning.
- Community-based DRR manuals.
- Multi-hazard risk assessment across different regions.
- Technical assistance on disaster management law.
- Setting up the DRR Knowledge Management Portal.

While the Red Cross has had a modest presence in Myanmar since the 1970s, the activities generally reflected its traditional remit: first aid training, volunteer management, retaining volunteers etc. Since Cyclone Nargis, however, funding has increased and the office has become a medium-sized federation, with a larger budget and over 500 fully trained volunteers. Despite the expansion, the Society argues that there remains a serious shortfall in funding for preparedness. Interviews conducted with staff for this report reveal how in challenging working conditions, with a very low baseline for preparedness, there is immense scope to improve community

<sup>39</sup> [http://reliefweb.int/sites/reliefweb.int/files/resources/SP351MMLTPF\\_12arn.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/SP351MMLTPF_12arn.pdf)

preparedness. For example, as a country with one of the lowest levels of mobile phone use, communication is a major problem. SIM cards can cost more than US\$100 and mobiles remain rare. Relatively inexpensive initiatives can, however, make a significant difference. In one reported example, through the support of two technicians from the American Red Cross, the American Red Cross replaced all communications systems in cyclone shelters as less than 50% were in functioning order – the technical equipment and expertise cost less than US\$1 million.

### Conflict preparedness

The lack of data (both in terms of agencies' activities and funding streams) on conflict preparedness suggests that there are few specific interventions being undertaken. Components of the work being pursued by the Myanmar Peace Centre and Myanmar Peace Support Initiative could come under the umbrella of conflict preparedness, although activities are regarded as peace-building, ceasefire monitoring etc., rather than 'preparedness for conflict' as such. Similarly, the work of UNHCR on national policy frameworks for the protection of individuals could be deemed as contributing to preparedness for conflict. The Rakhine Contingency Plan articulates the need for conflict

preparedness but does not identify specific activities or set out a corresponding budget to support this. Similarly, there is piecemeal work on reconciliation, but these are poorly coordinated and do not come under the preparedness categories used in this report.

The mainstay of in-country opinion is that preparedness for conflict does not take place; and efforts that were described lie outside of the specific list of activities in the matrix (Annex 7). Respondents largely struggled to articulate what preparedness for conflict could look like, as distinct from the activities described under broader umbrella of emergency, disaster or crisis risk management.

Further investigation is warranted where actors (supported by donors) are attempting to address complex conditions involving both natural hazard-related disasters and situations of violence, conflict and fragility; either directly or indirectly. The siloed nature of existing funding mechanisms means that preparedness for conflict is not articulated, however there is reason to believe that this could be symptomatic of this being a premature field of work, rather than reflective of action on the ground.

**Table 3. Department for Relief and Resettlement spending on emergency preparedness**

Categories of emergency preparedness		Project title	Volume of funds (US\$)	Period of funding
Institutional and legislative frameworks	Regional and international agreements	AHA Centre Fund, AADMER Fund	150,000	2012–2014
Response coordination capacity (human resources, equipment, processes/administration)	Human resource surge	Overseas training, seminar, workshops and provision of learning materials and equipment	61,111	2013–2014
Preparedness implementation (human resources, equipment, training)	Contingency planning	Development of disaster planning	27,888	2013–2014
	Simulations and drills	Evacuation drill	14,444	2013–2014
	Training for response	Awareness raising training for disasters	43,333	2013–2014
	Stockpiling/prepositioning	Stockpiling relief items	34,533	2013–2014
Specific community preparedness		Development of IEC materials, DRR commemoration	23,333	2013–2014
Funding mechanisms for response		Emergency response	685,555	
		National Reserve Fund for Emergency Relief	111,111,111	2013–2014

## Channels of delivery for financing emergency preparedness

### Government spending

The GoM does not track spending on emergency preparedness or related activities. Even with the capacity to manually code and track funding, this was not feasible within the current systems due to the lack of data, access and comprehensiveness. Through primary research the DRR did kindly provide the following data showing national budget expenditure including for preparedness activities.

### The Aid Profile

According to the Development Assistance Committee of the Organisation of Economic Development Co-operation (OECD/DAC), the volume of ODA to Myanmar in 2011 was US\$386.3million. Of this, US\$226.4million was provided from the top five donors, equating to a total of 58.6% of ODA from just five donors (of a recorded 36 donors in total).

There are many channels for humanitarian and development funding, a composite list is provided below sourced from all humanitarian pledges, commitments and contributions 2010–2013.

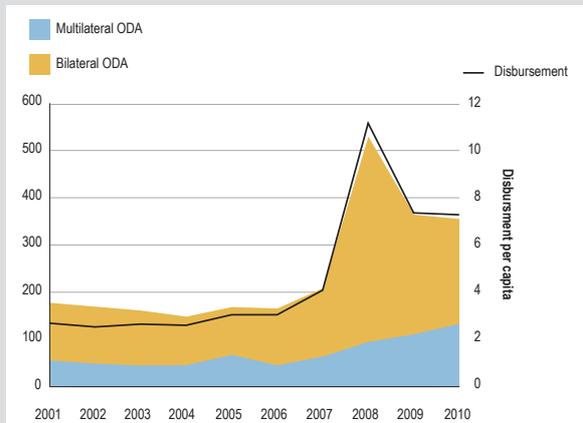
An overview of the ODA (multilateral and bilateral) provided to Myanmar between 2001 and 2010 is shown below, based on data from the OECD/DAC. Multilateral assistance ranged between US\$45–67 million between 2001 and 2006, since then ODA increased each year up to US\$133 million in 2010. Bilateral ODA to Myanmar dropped from US\$122 million in 2001 to US\$101 million in 2005, thereafter an increase annually with a peak of US\$434 million in 2008, and drop to US\$253 million and US\$221 million for 2009 and 2010, respectively.

The financing includes grants, net loans and net debt relief grants (see Annex 5). The latter have remained relatively constant through 2000s, with an increase in grants since 2006 and peak of around US\$532 in 2008.

Funding to Myanmar is largely for humanitarian relief related to natural disasters and conflict. Table 4 below lists the main sources of aid to Myanmar between 2001 and 2012. Funding for humanitarian aid has increased, from US\$1.5 million in 2001 to US\$43.5 million in 2012, with a peak of US\$620 million in 2008 (related to Cyclone Nargis relief and recovery). Funding for emergency preparedness activities come largely from humanitarian budgets, as part of a 'build back better' approach. DRR, which contains some preparedness activities, is largely funded from humanitarian budgets. This takes the form of ECHO (DIPECHO) and individual bilateral ODA (channelled

Donor
Australia
Bill and Melinda Gates Foundation
Brazil
Canada
CERF
China
Czech Republic
Denmark
Emergency Response Fund (OCHA)
ERF Recipients Outside Appeals
European Commission Humanitarian Aid Office (ECHO)
Finish Red Cross
Finland
France
French Red Cross
Germany
IFRC Disaster Relief Emergency Fund
India
Ireland
Italy
Japan
Japanese Red Cross
Luxembourg
Netherlands
Netherlands Red Cross
New Zealand
Nippon Foundation
Norway
Private (individuals and organisations) through Medecins Sans Frontieres, World Food Programme, Adventist Development and Relief Agency (ADRA), Mingala Myanmar, Save the Children, World Vision International, ActionAid
Red Cross Society of China
Republic of Korea
Save the Children
Sweden
Swedish Red Cross
Switzerland
Taiwan Red Cross Society
Thai Red Cross Society
Thailand
UN Trust Fund
Unearmarked funds from UNHCR
Unearmarked funds from UNOPS
Unearmarked funds from WHO
United Arab Emirates
United Kingdom
United States of America

**Figure 2: Overview of international development assistance**  
Net ODA Disbursements (total and per capita) (US\$ million)



	MULTILATERAL ODA	BILATERAL ODA	TOTAL	DISBURSMENTS
2001	55.55	122.05	177.6	2.77
2002	48.93	120.63	169.56	2.61
2003	45.03	116.22	161.25	2.73
2004	45.64	102.72	148.36	2.68
2005	67.52	101.14	168.66	3.13
2006	45.29	120.41	165.7	3.13
2007	64.02	144.27	208.29	4.18
2008	94.89	434.63	529.52	11.31
2009	110.97	253.18	364.15	7.48
2010	133.22	221.86	355.08	7.4

Source: OECD, 'Aid (ODA) disbursements to countries and regions [DAC2a]', accessed at <http://www.aidflows.org> on 29/01/2013.

**Table 4. General humanitarian and other disaster-related aid to Myanmar (2001–2012)**

Year	Type of aid	Amount (USD)	Total per year (USD)
2012	Humanitarian aid	43.4 million	43.4 million
2011	Humanitarian aid	77 million	79 million
	Flash flood response (Oct)	1.1 million	
	Earthquake response (March)	1 million	
2010	Humanitarian aid	54 million	142.9 million
	Cyclone Nargis recovery & reconstruction	54.2 million	
	Cyclone Giri response (Oct)	21.6 million	
	Flood response (June)	13 million	
2009	Humanitarian aid	86 million	205 million
	Cyclone Nargis relief & recovery	118.2 million	
	Disaster Preparedness	1 million	
2008	Humanitarian aid	98.4 million	620 million
	Cyclone Nargis relief & recovery	567.3 million	
2007	Humanitarian aid	37 million	37 million
2006	Humanitarian aid	27.3 million	27.3 million
2005	Humanitarian aid	25 million	27.1 million
	Tsunami response (Jan)	2.1 million	
2004	Humanitarian aid	16.8 million	17.1 million
	Storm response (May)	263,637	
2003	Humanitarian aid	11.1 million	11.1 million
2002	Humanitarian aid	8.6 million	8.6 million
2001	Humanitarian aid	1.5 million	1.5 million

Source: SDC-ADPC (undated).

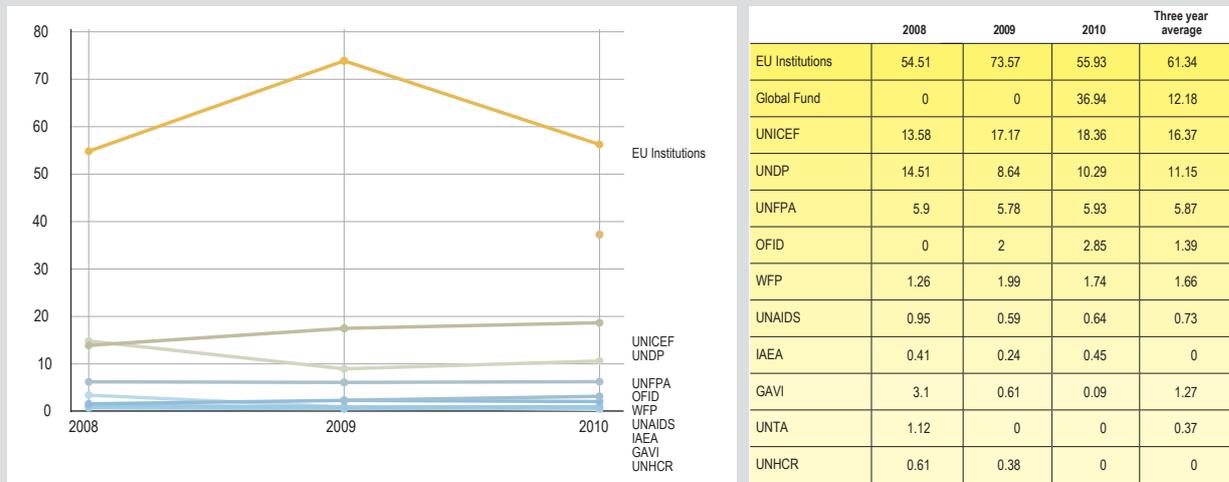
through UN agencies, NGOs and others). In Myanmar, donors such as the US Agency for International Development (USAID) and the UK's Department for International Development (DFID) fund preparedness activities as a part of their humanitarian response. Others, such as Norway, support DRR and preparedness from combined humanitarian, conflict resolution and development funds (Norwegian Ministry of Foreign Affairs, 2008: 28).

## Multilateral and bilateral funding

### Multilateral funding

The top multilateral donors to provide development assistance to Myanmar between 2008 and 2010 are the EU institutions, the Global Fund, UNICEF, UNDP, UNFPA, the OPEC Fund for International Development (OFID), WFP, UNAIDS, IAEA, GAVI and UNHCR.

**Figure 3. Multilateral ODA**  
Sources of ODA (Top 10 donors – multilateral) (US\$ million)



Source: OECD Aid (ODA) disbursements to countries and regions [DAC2a]. Available at: <http://www.aidflows.org> on 29/01/2013.

Of the various multilateral donors, the European Commission including DIPECHO is the most relevant for preparedness and risk reduction. The European Commission Humanitarian Aid and Civil Protection Directorate provides humanitarian assistance through various financing lines: emergency decisions, Humanitarian Implementation Plans (HIPs), small scale humanitarian response to disasters, and response to/preparedness for small-scale disasters via the Disaster Relief Emergency Fund (DREF). In Myanmar this largely takes the form of annual HIPs (including emergency responses), DREF (earthquake response) and small-scale response (floods etc.). Through ECHO a range of activities have been funded to enhance response capacity. Annex 6 lists these, and includes a manual coding of the various preparedness activities that fall under each project.

In 1996 ECHO established DIPECHO in order to enable communities to better prepare for, and protect themselves from, natural disasters. The programme began in Myanmar in 2010/2011 in Myanmar with an allocation of approximately €0.8 million to support two projects in the western coastal areas.<sup>40</sup> Under the 2010–2011 DIPECHO 7<sup>th</sup> Action Plan for South East Asia which had a value of €10 million, Myanmar received 9.44% of the funds.<sup>41</sup> In 2011, DIPECHO funding in Myanmar reached €1.5 million. In 2012, the European Commission humanitarian aid to Myanmar reached €24.7 million, and emergency preparedness received €1.65 million through DIPECHO, mainly for projects focused on the earthquake fault line and on coastal areas at risk of cyclones, tropical storms, storm surge and tidal waves – concentrating on the most

vulnerable communities in each region.<sup>42</sup> DIPECHO's indicative allocation for South East Asia in 2012–2013 is €11 million. Of that, Myanmar's proportional allocation is projected to increase compared to 2010–2011, though we do not yet know by how much.<sup>43</sup>

DIPECHO has channelled funds through ECHO partners including international NGOs, the UN and international organisations in support of a range of preparedness activities. Through a manual coding, the preparedness activities from each project have been identified (projects since 2010).

### Bilateral funding

The top bilateral donors providing development assistance to Myanmar between 2008 and 2010 are the UK, the US, Australia, Japan, Norway, Sweden, Denmark, Germany, Switzerland and Turkey, and these donors have continued to be the most important in financial terms (see Figure 4).

Japanese emergency preparedness assistance consists largely of technical assistance, capacity development for the government, and grants (for constructing shelters and schools). JICA has developed a strong niche in the technical components of early warning systems and has played a significant role in the establishment of the national emergency operations centre. For example, JICA is providing weather-station systems (for forecasting), is helping to mainstream DRR in various infrastructure projects, and is supporting contingency planning in conflict-affected areas such as Rakhine and Kachin

<sup>40</sup> [http://ec.europa.eu/echo/files/aid/countries/factsheets/myanmar\\_en.pdf](http://ec.europa.eu/echo/files/aid/countries/factsheets/myanmar_en.pdf)

<sup>41</sup> The remainder is allocated as follows: 19.89% for Philippines, 18.89% for Cambodia, 17.50% for Indonesia and 16.39% for Vietnam. See: [http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO\\_sea\\_annex.pdf](http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO_sea_annex.pdf)

<sup>42</sup> [http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO\\_sea\\_annex.pdf](http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO_sea_annex.pdf)

<sup>43</sup> [http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO\\_sea.pdf](http://ec.europa.eu/echo/files/funding/decisions/2012/HIPs/DIPECHO_sea.pdf)

**Table 5. DIPECHO funded preparedness activities**

Channel	Description	Emergency preparedness activities
UNDP	Strengthening DRR Practice in Myanmar through research and enhanced inter-agency coordination	Hazard/risk analysis, government coordination mechanisms, inter-agency coordination – national and sub-national, information management systems, cluster/sector information management systems.
Malteser, ActionAid	Reduced vulnerability of the Myanmar population living in coastal areas most affected by recurrent natural hazards	Early warning systems, hazard/risk analysis, inter-agency coordination, community preparedness, contingency/preparedness and response planning, simulations, drills, specific country context training opportunities.
ActionAid, Malteser, HelpAge, UN Habitat, PLAN, Oxfam	Safer coastal and urban communities through disaster risk reduction	Early warning systems, hazard/risk analysis, inter-agency coordination, community preparedness, contingency/preparedness and response planning, simulations, drills, accredited training opportunities, specific country context training opportunities.
IFRC	Regional DIPECHO action (2012)	Early warning systems, hazard/risk analysis, community preparedness, contingency/preparedness and response planning, simulations, drills, specific country context training opportunities, contingency partnership agreements.
Oxfam	Regional DIPECHO action (2012); AADMER Partnership Group	National Plan of Action, National Platform, National Disaster Management Authority, regional agreements, accredited training opportunities, specific country context training opportunities, contingency partnership agreement.

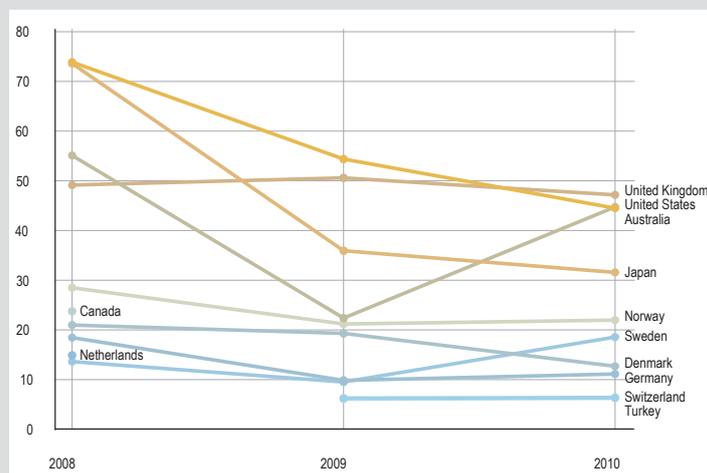
States. JICA is also providing some development support for processes to reduce conflict and foster peace (JICA interview).

Other donors with an active role in supporting preparedness include the Royal Government of Norway, which is strengthening institutional and legislative frameworks in DRR through policy dialogue, technical support and capacity building of government and civil society partners. This includes both the development of the Disaster

Management Bill and DRR Guidelines and individual community-based DRM activities in conjunction with the GoM's Planning Department. Norway has also supported national plans of action, specifically the implementation of the MAPDRR through implementing partners ADPC, UNOCHA, UNDP, MRSC and others.

A brief summary of the top three bilateral donors' priorities in emergency preparedness is provided below.

**Figure 4. Bilateral ODA  
Sources of ODA (Top 10 donors – bilateral) (US\$ million)**



	2008	2009	2010	Three year average
United Kingdom	73.47	54.02	44.17	57.22
United States	73.18	35.63	31.28	46.7
Australia	54.73	22.12	44.4	40.42
Japan	48.8	50.24	46.83	48.62
Norway	28.21	20.93	21.71	23.62
Canada	23.52	0	0	9
Sweden	20.72	19.05	12.46	17.41
Denmark	18.2	9.62	10.9	12.91
Netherlands	14.66	0	0	7.65
Germany	13.39	9.3	18.31	13.67
Switzerland	0	6.07	6.19	0
Turkey	0	5.85	6.03	0

Source: OECD Aid (ODA) disbursements to countries and regions [DAC2a]. Available at: <http://www.aidflows.org> on 29/01/2013.

## United Kingdom

The UK led the suspension in April 2012 of EU sanctions on aid in Myanmar, which allowed its partnership with the country to be renewed. Aid from DFID, the UK bilateral agency, does not channel funds through the central government but through UN agencies and local NGOs and where possible at the township level (DFID, 2012: 3). As a major contributor to Myanmar, DFID has focused largely on disaster response, including for example £7 million to the Humanitarian Multi-Stakeholder Fund /local ERF for response to conflict-affected areas.

The UK is expected to increase aid to Myanmar: from £31 million in 2010/11, £36 million in 2011/12, £32 million in 2012/13, £56 million in 2013/14 and £60 million in 2014/15.<sup>44</sup> DFID will also move towards larger programmes with longer-term goals, organised around five key areas: good governance and public financial management; promoting responsible investment; improving transparency; strengthening the work of parliament; and helping the process of ethnic reconciliation (DFID, 2012: 3).

DFID's allocation for Myanmar for 2013/2014 is £56 million, or 0.85% of its total budget.<sup>45</sup> There are currently 12 active projects in the country, of which three are disaster related: support to conflict-affected refugees and displaced persons; assistance to conflict-affected communities in Eastern Burma; and humanitarian assistance in Rakhine State (according to June 2013 projections).<sup>46</sup>

While emergency preparedness and DRR are not articulated as a key theme in UK spending in Myanmar, DFID has funded important activities, such as supporting ADPC's input to the process, which initiated the MAPDRR. Interviews revealed that over the longer term, DFID will cease the post-Cyclone Nargis relief programme and move towards longer-term recovery for the affected areas.

At the country level, DFID has been one of the key advocates for preparedness and contingency planning in Rakhine State, where the UN Inter-Agency Preparedness and Contingency Plans have been issued. While these focus on the upcoming rainy season, there is also scenario planning for cyclones and further conflict. DFID has also had a degree of involvement with the MSWRR and the Myanmar Red Cross in-country.

At the time of writing, the current and proposed DFID funding for Rakhine State, which includes elements of preparedness, was not in the public domain. The focus is expected to be on conflict-displaced personnel and the

upcoming rainy season in the sectors of water and sanitation, hygiene and nutrition, through stockpiling hardware and awareness raising. There is likely to be a similar process in Kachin State, where there is potential for further violence, conflict and displacement in the future.

## United States

In addition to its mainstay humanitarian funding (see USAID, 2013), USAID has a strong focus on emergency preparedness and DRR; terms it uses interchangeably. USAID has made the case for emergency preparedness in the US Congress, achieving agreement to allocate 10% of funding to emergency preparedness and DRR. Primary research suggests that more than that may be allocated in the East Asia and Pacific (EAP) region given the complex risk context; with an additional US\$479,794 allocated to integrate DRR with disaster responses across the EAP region in the coming year (USAID interview). The agency recognises that emergency preparedness and DRR are crucial to mitigating the impact of disasters and to improving emergency response. USAID's priority preparedness activities are focused on natural hazard-related disasters, although USAID notes that many of the capacity-building activities could also enable more effective response to conflicts. Specific DRR and emergency preparedness activities collated from the list of all humanitarian pledges, commitments and contributions from 2010–2013 are outlined in Table 6.

## Australia

Australia's total ODA to Myanmar has steadily increased, from AU\$ 6.8 million in 2002/3, AU\$ 11.8 million in 2004/5, AU\$ 13.1 million in 2006/7, AU\$ 46.5 million in 2008/9, AU\$ 52.2 million in 2010/11, and AU\$ 63.8 million in 2012/13. Aid is aligned with Australia's Comprehensive Aid Policy Framework, which includes an objective on DRR. However, the Australia-Myanmar Aid Program Strategy 2012–2014, does not articulate emergency preparedness or DRR as a main priority. It does, however, state that the third of four objectives is to 'address the needs of conflict and disaster-affected people' (AusAID, 2013: 4), and will channel assistance through multilateral agencies, international NGOs and local partners.

Examples of significant AusAID-funded programmes:

- After Cyclone Nargis struck in May 2008, a DRR project entitled 'Building Community Resilience Through Strengthening Early Warning Systems and Disaster Risk Reduction Mechanisms', was designed: the AU\$ 750,000 project ran from 1 March to 31 December 2009, implemented in partnership with World Vision. It aimed to increase community resilience through capacity building in early warning, disaster preparation, and disaster response and mitigation strategies. The project took a holistic approach, focusing

<sup>44</sup> Data obtained from DFID.

<sup>45</sup> <http://devtracker.dfid.gov.uk/countries/MM/>

<sup>46</sup> <http://devtracker.dfid.gov.uk/countries/MM/projects/>

**Table 6. Preparedness activities funded by USAID/OFDA 2010–2013**

Channel	Funding US\$	Project description	Hazard/risk analysis and early warning		Contingency/preparedness and response planning		Training and exercises	
			Early warning systems at various scales	Hazard/risk analysis	Community preparedness	Contingency/preparedness and response planning	Simulations, drills	Country context training
IOM	1,000,000	Project called Reducing Risks from Natural Disasters and Displacement			x			x
OCHA	150,000	Unknown						
Save the Children	313,669	Project called Civil Society Capacity for DRR			x	x		x
WMO	150,000	Project called Addressing Flash Flood Risks	x	x				
World Vision International	523,785	Project called Building Community Resilience	x		x	x	x	x
ACTED	677,376	Project called Increasing Disaster Preparedness in Coastal Communities			x	x	x	x
USGS	118,560	Project called Mitigating Seismic Risks		x		x		x
UN Habitat	636,650	Project called Encouraging Safer Land Use			x			x

on all potential risks or common disasters within the particular area.

- In the aftermath of Cyclone Giri, AusAID provided AU\$ 300,000 to CARE and AU\$ 500,000 to Save the Children to make an emergency response, which included the application of DRR tools and approaches 'to avoid reinstating the vulnerability that render people prone to disasters'. The projects ran from 26 November 2010 to 31 May 2011 in Rakhine State.
- The 'Rakhine Rural Household Livelihoods Security Project' was a livelihood security project to enhance assets, income and health among poor, predominantly Rohingya households in northern Rakhine State. A DRR component was added mid-way through the project. This included partnering with the local NGO Mangrove Service Network to provide awareness-raising sessions at the village and township level. Through CARE, the project began in 2004, added a DRR component in 2009 and ran through to 2011. The entire project cost AU\$ 4 million, but the amount spent on the DRR component was not available.
- DRR is also a component of 'Strengthening Partnerships and Resilience of Communities', a livelihood security project to improve the social and economic position of poor households in northern

Rakhine State. It also aimed to strengthen household and community capacity to sustain such improvements. The DRR component focuses on developing community-based DRM plans; improving the capacity of communities to prepare for and manage the effects of disasters; improving the Government's capacity to respond to disasters; and strengthening the technical, operational and management capacities of local partners and service providers. The project is due to run from 2011/12 to 2015/16 but has been suspended due to recurrent violence in Rakhine State. The total budget is AU\$ 7 million, of which the DRR component is approximately AU\$ 70,000 (US\$69,000).

### Examples from the UN System

A full articulation of the funding flows and volumes spent on emergency preparedness through the UN system is impeded by the failure to have finance codes which track emergency preparedness activities. Identifying preparedness budget/expenditure is only possible through manually identifying the preparedness components of projects. An added complication is that without a project-by-project assessment it can be difficult to separate agencies implementing preparedness activities for

others (e.g. UNDP community-based preparedness) with preparedness for themselves (e.g. WFP own preparedness as part of logistical operations).

As the primary mechanism coordinating and spearheading preparedness within the UN system, OCHA's current core budget allocation for discrete preparedness activities in 2012 and 2013 includes: US\$3,215 on national coordination (October 2012 and March 2013), US\$1,868 on international coordination (May 2012 and April 2013), US\$1,423 on contingency planning (May 2012), US\$4,138 on training for response (May 2012 and March 2013)<sup>47</sup>. For some agencies such as WFP, preparedness is a non-distinguishable part of their daily operations. Aside from the overall agency budget and expenditure figures, some staff regarded even manual coding of preparedness activities as an arbitrary exercise; because the activities noted in Annex 7 are embedded within all operational activities.

A number of UN agencies interviewed spoke of the challenges of securing funding for the complete suite of activities outlined within annual work plans. As a result many agencies are looking beyond their usual donors. For example, UNHCR in Myanmar are traditionally funded by ECHO, US, Japan and Australia, but are looking to other sources to complete the 2012–2013 programme of work: 'The operational budget of the prioritised plan corresponds to less than 40% of the comprehensive budget' (UNCHR, 2012: Annex 3, page 18). UNHCR therefore argues its financial and human resources are well below what is required to address the needs of 454,200 internally displaced persons and 800,000 stateless persons that come under its mandate.

For some types of activities, funding is forthcoming. Continuing with the UNHCR example, within the forthcoming budget, preparedness activities include: funding from ECHO and Japan (to be confirmed) for early warning systems (US\$21,730 on data management and protection); hazard/risk analysis and mapping (US\$80,600 for profiling and coordination); and training for response (US\$20,615 for CCCM training and capacity building). It is also worth noting that many of the operational activities in situ are also complimented by government contributions, including allocations towards health, education and shelter facilities as well as staffing, machinery and travel.

Where preparedness is a discrete part of an agency's role and remit, preparedness projects carried out are relatively easy to identify. UNFPA and UN Habitat provide useful examples (for UNFPA see Box 3). UN Habitat has undertaken a range of preparedness activities contributing to

information analysis and management and preparedness (human resources, equipment and training):

- A US\$300,000 DIPECHO-funded earthquake risk assessment project in conjunction with the RRD, the Myanmar Engineering Society and Myanmar Geoscience.
- A proposed flood risk assessment to be conducted with the Norwegian Ministry of Foreign Affairs for Hpa-An City, working in partnership with Department of Meteorology and Hygrology, Department of Human Settlements and Housing, at a cost of US\$40,000.
- A National Disaster Damage and Loss Database costing US\$20,000, in conjunction with RRD, UNDP and the United Nations International Strategy for Disaster Reduction (UNISDR), and a DRR-Disaster Information Assimilation Source Web Portal costing US\$15,000, managed jointly with RRD and the DRR Working Group. The Norwegian Ministry of Foreign Affairs funds both projects.
- At the township level, UN Habitat has developed DMPs through a US\$30,000 project funded by DIPECHO and Norwegian Ministry of Foreign Affairs.
- UN Habitat has also undertaken training in emergency response: a US\$43,000 DIPECHO-funded project supplies training kits; a US\$40,000 project funded by the Norwegian Ministry of Foreign Affairs for a disaster management course jointly run with the RRD and the Department of Rural Development; and a US\$57,000 multiple donor-funded awareness programme, again in conjunction with the RRD.

Of the UN operations which provide most scope for working on emergency preparedness for both natural and man-made disasters, UNDP's Combined Thematic Trust Fund (CPR TTF) offers most potential – at least on paper, being one of the few which bridges both natural and conflict related disasters. CPR TTF and UNDP regular resources for Crisis Prevention and Recovery expenditure in 2011 for Myanmar reached US\$428,816, of which US\$369,825 was in the field of disaster risk reduction and recovery, and US\$73,418 for early recovery. Interestingly, no funds were expensed under the theme of conflict prevention and recovery (BCPR, 2011). Alternative figures for CPR TTF and crisis-related core resources for 2011 show a total of US\$428,816, with core resources for disasters providing US\$53,345 and CPR TTF resources for disasters as US\$375,471 (with no resources used for conflict prevention or recovery).

The examples provided here from across the UN system help to shed light on the types of preparedness activities being undertaken by different agencies, programmes and funds. However, they provide only a piecemeal understanding of the full range of preparedness actions required. It was routinely suggested within interviews that more needs to be done to deliver on the suite of emergency preparedness activities outlined in the matrix (Annex 7). It was also highlighted that there is a dearth

<sup>47</sup> Figures provided by OCHA in-country though concern has been raised by the researchers as to the relatively small amounts shown here. Further investigation would be valuable.

### Box 3. UNFPA and emergency preparedness

UNFPA's total 2013 country budget for Myanmar is US\$9,709,707, comprising core funds of US\$6,915,585 (with an additional US\$44,606 for Rakhine State) and non-core (external sources) of US\$2,794,122 (with an additional US\$20,000 from Turkey).

The Humanitarian Unit Budget consisting of preparedness and response, excluding human resources and other costs, accounts for US\$1,062,471 or 11% of the country programme budget. It is made up of core funds US\$284,629 (UNFPA US\$98,324, Myanmar Medical Association (MMA) US\$99,246, MMA additional US\$44,606 and Myanmar Red Cross Society (MRCS) US\$42,453); and non-core funds of US\$777,842 (Denmark US\$475,000, CERF US\$282,842 and Turkey US\$20,000).

Of this, the total budget allocated for preparedness is US\$702,679. This derives from activities within three programmes:

- US\$443,924 from Danish funds is channelled through MMA, for 'improving reproductive health care in Shan East State'. This includes procurement of emergency kits, training on gender-based violence (GBV), reproductive health and multi-stakeholder partnership (MSP) programmes, workshops on sexual and reproductive health, human immuno-deficiency syndrome and GBV in emergency settings etc. The overall programme costs US\$475,000 and is part of a multi-country project to improve reproductive health care in humanitarian and transitional settings.
- US\$258,755 from core funds goes to programmes managed by MMA and MRCS. This includes a US\$28,002 project for MMA on training of reproductive health trainers and private service providers and MISP training for medical practitioners. A further US\$230,753 is channelled through MMA and MRCS for 'strengthening health systems by promoting ARH information and services (humanitarian)', which includes procurement of dignity kits and reproductive health commodities; advocacy on sexual and reproductive health; gender and MISP mainstreaming; workshops for updating contingency planning; meetings and coordination with other stakeholders; offering mobile and static clinic services; MISP training; advocacy on the emergency response plan; MISP and RRT and implementing project staff salaries.

In support of the preparedness and response activities, the UNFPA Country Office in Myanmar has a dedicated Humanitarian Affairs Unit (responsible for preparedness and response) with senior international staff, a national officer and two assistants. The annual salary and operational costs are approximately US\$200,000.

of understanding on the volume of funds that would be required to meet this need.

### International Federation of Red Cross and Red Crescent Societies (IFRC) and the Myanmar Red Cross Society (MRCS)

IFRC and MRCS primarily obtain funding for preparedness activities through an annual appeal, with a focus on emergency preparedness and community resilience. In-country representatives noted that occasionally proposals are developed with individual donors such as DFID and USAID. In addition, activities linked to preparedness can be funded from emergency appeals.

Primary research suggested that the current annual budget is approximately Swiss Francs 4.5 million of which a little over 20% is spent on preparedness. Since the expansion of international activities post-Nargis MRCS funding has increased by around 10–20% annually.

### Pooled funding

Of the various historical and current trust funds, the ongoing Livelihoods and Food Security Trust Fund (LIFT) is the most relevant, with some (if indirect) dimensions of preparedness included. LIFT is a multi-donor trust fund established in 2009 to provide 'an effective mechanism for channelling aid to partners to achieve its goal of improving the food and livelihood security of the poor and vulnerable in Myanmar'.<sup>48</sup> LIFT is managed by the United Nations Office for Project Services (UNOPS) and funded by Australia, Denmark, the EU, France, Netherlands, New Zealand, Sweden, Switzerland, the UK and the USA. LIFT works through 32 partners, of which 27% are local NGOs and 29% are a partnerships between local and international NGOs.

The LIFT project database<sup>49</sup> reveals a number of projects that explicitly include DRR elements, which can be considered as contributing to emergency preparedness at one end of the preparedness continuum, where capacity building and vulnerability reduction support preparedness more broadly. Examples include:

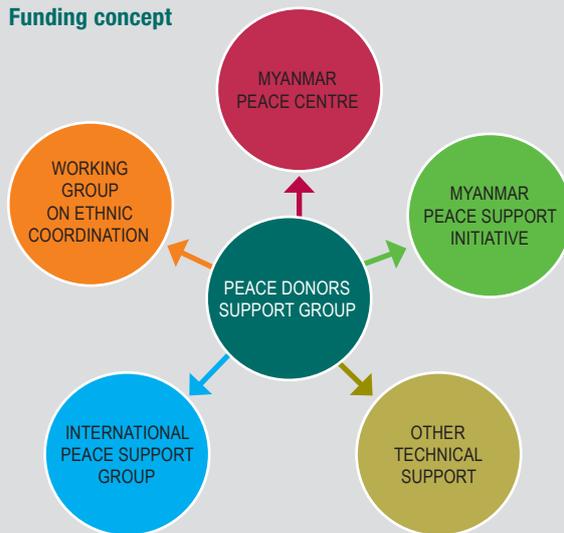
- 'Civil society led community-based livelihood resources development', projects with a US\$1,965,742 budget, implemented by ActionAid.
- 'Community-initiated livelihoods and poverty reduction projects', a project with a US\$2,822,805 budget, implemented by ADRA.
- 'Reducing Risks and Improving Livelihoods in the Rice Environments' a project with a budget of US\$2,013,942, implemented by International Rice Research Institute (IRRI).

<sup>48</sup> <http://www.lift-fund.org/>

<sup>49</sup> [http://www.lift-fund.org/project-search?search\\_api\\_views\\_fulltext=disaster&=Apply](http://www.lift-fund.org/project-search?search_api_views_fulltext=disaster&=Apply)

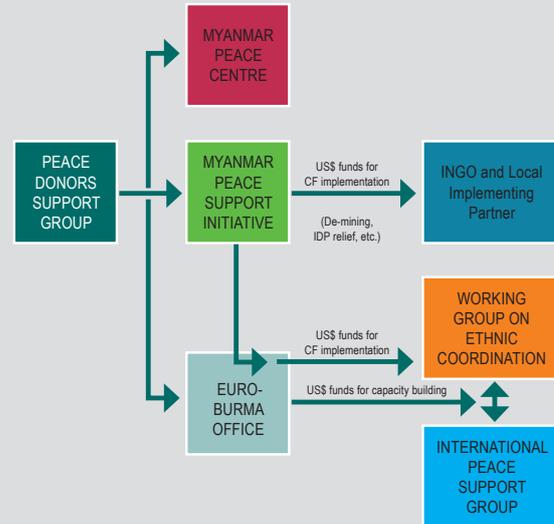
Figure 5. Peace Donor Support Group – funding concept and mechanism

Funding concept



Source: Figures created by the Peace Donor Support Group.

Funding mechanism



The LIFT website does not permit the disaggregation of spending on discrete preparedness activities.

Finance for conflict preparedness

In June 2012, the Peace Donor Support Group (PDSG) was formed to provide a coordinated donor platform for support to GoM’s peace process (see Figure 5). The PDSG is chaired by Norway and includes Australia, the UK, the EU, the UN and the World Bank. A total of US\$500 million was announced on 12 June 2012 to support peace-building and other projects, including humanitarian assistance, in the ceasefire areas.

The humanitarian assistance and preparedness plans are severely under-funded. In June 2012, the UN launched a revised appeal for the Rakhine Response Plan, revised in July 2012, calling for US\$67.6 million for life-saving interventions for a one-year period (July 2012–July 2013). By November 2012, only US\$19 million had been donated or pledged. It is unclear what proportion of these funds could have contributed to preparedness activities (given that humanitarian response funds do sometimes contribute in this way), but the consensus from key respondents in Myanmar is that this was purely focused on life-saving needs, not least because of the budget shortfall.

Remittances

Outside of the national budget and ODA, remittances provide another possible source of funding for preparedness activities. Remittances to Myanmar have been steadily increasing (see Table 7). The World Bank (2013) remittance data for Myanmar is only available from 1987 onwards. Alternative sources suggest that for 2009 remittance inflows equated to 0.4% of Myanmar’s GDP. Remittances come from Myanmar’s migrant workers in neighbouring countries who capitalise on the comparatively high salaries; yet the decision to send remittances (and the volume) is complex, involving difficult sets of choices regarding the migrants’ own living conditions and quality of life (Sandar, 2011).<sup>50</sup>

Collecting data on remittances is incredibly challenging, not least because sources of data such as from the International Monetary Fund (IMF) annual statistics only record data from official banking channels. The figures

<sup>50</sup> [http://www.pol.cmu.ac.th/www/gms/files/seminar/revised-article/CMU\\_GMS\\_Sandar\\_migrant%20remittance%20payments\\_final\\_2.0.pdf](http://www.pol.cmu.ac.th/www/gms/files/seminar/revised-article/CMU_GMS_Sandar_migrant%20remittance%20payments_final_2.0.pdf)

<sup>51</sup> Source: World Bank staff calculation based on data from IMF Balance of Payments Statistics database and data releases from central banks, national statistical agencies, and World Bank country desks.

Table 7. Myanmar migrant remittance inflows (figures shown in US\$ million)<sup>51</sup>

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
US \$ m	6	7	9	6	2	0	28	42	81	122	147	136	135	102	116	105	84	117	129	115	81	55	54	115	127	566

therefore cannot be treated as a complete picture of remittances. Studies suggest that the majority of remittances are through private or unofficial channels or non-banking instruments; the actual funds could be three or four times the official estimates.<sup>52</sup>

It is impossible to connect the volume of remittances to the possible spending of those funds on individual or household preparedness. Nonetheless, remittances to Myanmar have been regarded as ‘...a critical lifeline that permits the survival of many thousands of families’ (Turnell et al., 2008: 64). As an illustrative example, annual remittances sent to families in Myanmar range from Bt 3000 to Bt 3 million, with the median being Bt 15,000 (US\$575) (from a study of 524 individuals) (*ibid.*).<sup>53</sup> The uses of remittances are reported to be predominantly for ‘basic survival’ as noted by 96% of respondents (*ibid.*).

### Private sector engagement in emergency preparedness

Private sector engagement in Myanmar is variable. Of the top 20 indigenous companies, the majority are banks, with the exception of Myanmar Oil and Gas Enterprise.<sup>54</sup> There is a dearth of evidence on the possible contribution or support to preparedness from such sources. There is a history of foreign companies engaging in disaster recovery and reconstruction. For example, Serge Pun associates (Singapore), are one of the largest foreign companies in Myanmar and built a model village following Cyclone Nargis, and were part of the response. A report by Trocaire (2011) discusses the role of the private sector in humanitarian response largely through the philanthropic work of companies in responding to Cyclone Nargis. It is not evident that emergency preparedness is part of this although it does refer to an agenda going forward which might have emergency preparedness included:

‘Based on the findings of this study, it is recommended that Trócaire initiates a national level public private partnership in disaster response, by promoting dialogue between the RUMFCCI and the Myanmar NGO Contingency Planning Working Group (CPWG). Though challenging, such an initiative offers great and sustainable potential rewards. Creating bridges between umbrella organizations is also a means to create partnerships between specific entities within them. It is also recommended that Trócaire explores cooperation with faith-based organizations to increase their capacities at tapping in the core competencies of the private sector, and to improve their operating standards as well as those of their private partners’.

<sup>52</sup> <http://epress.anu.edu.au/myanmar02/pdf/ch05.pdf>

<sup>53</sup> <http://epress.anu.edu.au/myanmar02/pdf/ch05.pdf>

<sup>54</sup> List of top 20 companies is at: <http://www.transnationale.org/countries/mrms.php>

### Box 4. USAID public–private partnership

USAID promotes cooperation with the private sector by issuing a Global Development Alliance annual programme statement inviting organisations to send proposals for support of between US\$500,000 and US\$1 million for future public–private collaborations. In 2013, one of the USAID programmes focuses on DRR and preparedness in Myanmar, Thailand and Vietnam. The first condition is that the projects must directly link to USAID priorities. As such they should aim to improve settlement planning and construction practices to reduce disaster risk or be focused on at least one of the emergency preparedness categories, i.e. early warning systems, community preparedness and/or risk/hazard assessments. The second condition is that the private contribution must match or exceed the level of USAID funding. This approach to public–private partnerships is a way for USAID to encourage the private sector to contribute to DRR and preparedness efforts by mobilising its expertise and innovative skills. As this is a new initiative, it is not yet possible to assess the value of such an approach.

There is growing interest in the possibility of leveraging public–private partnerships. As one of the main donors, USAID is promoting increased public–private partnerships in Myanmar through its latest calls (see Box 4). Similarly, the international community including members of the UN system are increasingly looking at a private sector role in DRR and emergency preparedness. During a visit in October 2011, UN Secretary General’s Special Representative for Disaster Risk Reduction, Margareta Wahlström, met with representatives from the Society of Engineers and the Myanmar Chamber of Commerce to discuss private sector involvement in DRR.<sup>55</sup>

### The state of preparedness in Myanmar

Emergency preparedness is designed to ensure a more effective and efficient humanitarian response. The need is vast in Myanmar, given the (re)current crises related to both natural hazards and conflict across the country. Despite the humanitarian caseload and the need for action on the ground, there is a widespread perception that coordination was somewhat simpler pre-Nargis due to the smaller number of operational agencies. That said, even with a high number of agencies and an OCHA presence post-Nargis, restrictions on access continue to shape the

<sup>55</sup> <http://www.gripweb.org/gripweb/?q=countries-risk-information/documents-publications/government-myanmar-adopt-disaster-risk-reduction>

sectors and geographical scope within which agencies can work. And while OCHA acts as the formal coordination body, there are few supporting mechanisms for coordination – the DRR Working Group being a rare exception.

The ‘preparedness gap’ in Myanmar is significant. It largely exists because preparedness activities do not address risk holistically – covering all potential disasters or crises and all the parties that need to be engaged in response. The feasibility of addressing the preparedness gaps is constrained by issues of access, and limitations on the ability of agencies to enact the full suite of responsibilities within their mandate; and the overarching challenging governance context. The lack of attention to preparedness is evident by its absence from the wider development and humanitarian priorities agencies and donors set out. Where there have been decisions to address preparedness these are largely as a result of discrete activities within a broader programme that have been successfully championed by individuals within an agency. The exceptions are the specific initiatives related to natural hazards that aim, for example, to build capacity or early warning systems in a particular region. Since the creation of the MAPDRR individual activities can now be viewed as one of a number of initiatives contributing to a broader vision of preparedness in the country. What limits this from being truly effective, however, is time-bound funding cycles, which constrain the ability of any agency to enact a sustainable system or initiative for preparedness. Achieving and sustaining systematic change within restrictive funding timeframes is virtually impossible.

## Results of OCHA survey on preparedness

OCHA undertook an online survey in 2011 to assess the self-perceived level of awareness of preparedness for humanitarian response. The results revealed that much can be done to build the knowledge and capacity of staff on emergency preparedness. The survey found that: of the respondents more than 60% were from NGOs (local and international),<sup>56</sup> the vast majority from Yangon (90.6%) holding a senior role (35% heads of agencies),<sup>57</sup> and engaging in a range of specialisations. International respondents were generally well aware of key humanitarian concepts, with greatest familiarity with the following (identified from a list of topics provided by OCHA): the cluster approach, RC/HC, OCHA’s role and humanitarian principles. International respondents were least familiar with: ‘the provider of last resort’ and the 2005 humanitarian reform. National respondents were less familiar overall than international respondents, with a lack of awareness in particular of global cluster leads, ‘the

provider of last resort’ and the 2005 humanitarian reform. Moreover, nearly 50% of national respondents were unfamiliar with the HCT’s functions and remit. In terms of response tools and services, international respondents had greater knowledge than their national counterparts and were most familiar with 4W, ReliefWeb and IRIN. They were least familiar with International Search and Rescue Advisory Group (INSARAG), Protection Standby Capacity (ProCap), Gender Standby Capacity (GenCap), Global Disaster Alert and Coordination System (GDACS) and ASEAN Agreement on Disaster Management and Emergency Response (AADMER). National respondents were familiar only with 4W and the MAPDRR.

Respondents had more mixed familiarity with contingency planning. Most were aware of their own agencies’ plans but less familiar with those of the GoM, NGOs and inter-agency contingency plans. About half of the respondents had participated in a contingency planning process, and half had recently taken part in a simulation exercise (although 37% had not). Overall respondents believed they had a medium to high level of awareness of preparedness, but were less familiar with others’ work and how to work collaboratively together.

Interestingly, there was relatively poor knowledge of humanitarian financing, with the exception of emergency funding mechanisms for the respondents’ respective organisations. Among the least familiar were OCHA Emergency Cash Grants, Emergency Response Funds, Consolidated Appeals Process and Flash Appeals, although 49% of respondents had been involved in preparing an inter-agency appeal.<sup>58</sup>

## Approach to preparedness

Primary research found that preparedness is regarded as a luxury, something to be addressed in the lull between crises. The recurrent crises and constant demand for response has dominated agencies’ attention and funding. Despite the equally recurrent rhetoric of the need to invest in preparedness, the lack of dedicated time and resources (human and financial) limits agencies’ ability to carve out and protect space for that to happen in any sustained manner. As is the case in several other contexts, preparedness is primarily addressed after an emergency – largely because funding for such work is limited and even then accessible only in the wake of emergency relief. For Myanmar, this has led to a series of ‘firsts’. Preparedness may only occur in the geographical or sectorial areas after a disaster. There has been little or no substantial or systematic investment in disaster preparedness. Despite widespread agreement that this is needed, the common

<sup>56</sup> 35% Local NGOs, 25% international NGOs, 22% UN, 1.1% Government, 1.1% Embassy, 4.5% church-based organisations and others.

<sup>57</sup> 22.1% head of cluster, 38.4% head of agency, 4.7% head of sub-office/unity, 8.1% RC office, and others.

<sup>58</sup> Of which 43.4% were involved in a funding appeal used by their own organisation, 21.2% in a CERF application, 15.2% in a Flash Appeal, 8.1% in an OCHA cash grant, 12.1% in a consolidated appeal.

explanations given are the lack of funds and the low priority donors give to the issue. It was repeatedly expressed (by donors and aid recipients) that preparedness remains invisible. It does not – as it is currently conceived – provide donors with the headline material to show tax-payers that aid is having impact and achieving ‘value for money’. This line of argument can be challenged. Most donor governments have their own institutions and services for emergency preparedness, which could be used to make the case for investing in preparedness as part of the ODA commitment. The difference is that funding in donors’ home countries comes out of tax dividends – what may be regarded as ‘development’ spending – rather than a separate budget line for emergency relief.

The working culture in Myanmar is characterised by the assumption that there will always be a ‘next’ disaster, the unknowns are simply where, when and how severe it will be. This is the standpoint taken by WFP, for instance. In-country representatives conveyed that their work is based on the assumption of an imminent disaster, and preparedness efforts are part and parcel of their working culture – what changes is the working probability and the scale of the impact of a disaster event. However, that is easier said than done. Many respondents to interviews conveyed that while they understood that agencies should try and build a culture of preparedness, conducting risk analysis and scenario planning as the basis for preparedness planning, there were built-in disincentives for taking action on preparedness. For example, the latent perception that stockpiling is wasteful, or that preparedness does not provide practical ‘things’ that can be used to demonstrate tangible outputs/action to donors.

### Distribution of emergency preparedness activities

The MIMU holds the most comprehensive database on projects operating within Myanmar. While MIMU does not include a classification of ‘emergency preparedness’, it does include DRR and this is where the majority of preparedness activities (as defined for this report) largely fall. MIMU has over 50 projects classified as DRR in its database, covering the whole spectrum of activities regarded as emergency preparedness. Of these, early warning, regional coordination and hazard/risk assessment are the most recurrent; meaning most common in terms of projects/activities implemented and funded. In addition, it is likely that emergency preparedness activities are taking place in projects that have been coded or classified under other categories – particularly when a sectorial category has been used such as health, water and sanitation.

A mapping of past and current DRR interventions in Myanmar undertaken by ADPC and MIMU (ADPC, undated) shows that a broad range of activities across all

priorities of the MAPDRR, HFA and AADMER are underway – although the overall distribution and scope of these activities is well below what is required. The classification of emergency preparedness activities used in this report straddles all seven of the MAPDRR priorities: Theme I: policy, and institutional arrangements; Theme II: hazards, vulnerability and risk assessment; Theme III: multi-hazard early warning systems; Theme IV: preparedness and response programmes, Theme V: mainstreaming of DRR into development; Theme VI: community-based disaster preparedness and risk reduction; Theme VII: public awareness, education and training. With a total of 64 projects recorded for ‘the past three years or more’, activities are spread relatively evenly across the seven themes; with the exception of Theme I, which noted just four projects, whilst all others had an average of ten projects.

To provide a flavour of the projects regarded under Theme IV on preparedness, 14 were recorded, which included: NDPCC development of the MAPDRR; Fire Services Department (FSD) Emergency Response Team and Emergency Operation Centre; Action Aid’s post-Nargis community preparedness and response planning; Planning Department’s Fire Prevention Standing Order and Relief and Resettlement Department’s Fire Prevention Action Plan; reconstruction of cyclone buildings post-Nargis by NRC and by ADRA Myanmar; cyclone preparedness activities by FREDIA; and the Agriculture Planning Department’s storm shelter embankments. The geographical scope of the activities is limited; seven are in the Ayeyarwady and one in Rakhine State (see Annex 4). Six or seven projects are regarded as nationwide (e.g. support to the development of the MAPDRR).

While not comprehensive, this snapshot reflects the broader type and distribution of emergency preparedness throughout the country. It is largely focused geographically on areas already known to need a humanitarian response, targeting community-based interventions or national policy directives – but little in between – with significant focus on ‘build back better’ reconstruction in cyclone-affected areas.

### Gaps in preparedness

In Myanmar a fully functioning, stable and systematic preparedness system doesn’t exist and the system that is there has gaps. These gaps, as articulated by interview respondents, range from local-level sector-specific gaps in preparedness through to a lack of a dedicated or institutionalised coordinated body working for preparedness more holistically, i.e. beyond the humanitarian realm to ensure preparedness continues in the absence of response-focused activities. The conclusions of the OCHA survey on preparedness (see Box 5) also point to a number of gaps that need to be addressed. The lack of qualified staff in Myanmar is also a critical hindrance to

### Box 5. OCHA online survey on preparedness

OCHA PowerPoint on findings from online survey on preparedness:

- The OCHA survey results represent a wide variety of agencies and roles but are Yangon-centric.
- Most respondents have some emergency experience but a large minority do not.
- National respondents need to have a better understanding of key concepts in humanitarian response. All could benefit from a humanitarian reform/cluster approach refresher.
- All respondents would benefit from an introduction or at least reading material on humanitarian tools and services (though perhaps not the 3Ws as awareness of 3W was high).
- Roughly half of the respondents have never participated in contingency planning. As such, an introduction to the concept would be needed before beginning such a process.
- A distinction between individual plans and the collective inter-agency contingency plan would also be helpful.
- There was some degree of experience in preparing funding documents, nevertheless a refresher on those likely to be used in the Myanmar context might be helpful.

Source: OCHA 2013 (unpublished PowerPoint)

emergency preparedness. Many agencies and government departments are understaffed, with many staff backstopping a range of roles and responsibilities and their time being diverted to response in times of crisis. This severely impedes the ability of agencies, departments and ministries to work systematically on preparedness.

With little funding explicitly measured against progress towards preparedness, and a range of competing demands on each agency, emergency preparedness tends to be side-lined. There are two exceptions to this. The first is within the DRR sector – in which many activities overlap with emergency preparedness – where funding largely comes from DIPECHO and through bilateral arrangements. Funding to UN agencies or NGOs for DRR typically takes the form of those agencies drawing on long term international experience with DRR in other countries and transferring existing approaches to Myanmar. Such project-based approaches to preparedness are time-bound with a discrete funding contract and set of prioritised outputs. These are almost solely for natural hazard-related disaster preparedness. Activities by agencies that are explicitly mandated to focus on preparedness for response, namely the Red Cross, aim to target both natural and conflict-related disasters.

### Factors limiting/undermining effective preparedness

The OCHA CLIPPER initiative sets a good example and possibility of providing strong leadership for preparedness in-country. However, coherent, coordinated and comprehensive plans of activities are required into which all national and international efforts on preparedness within the country can contribute. Within the government, the MAPDRR comes close to being the preparedness plan for disasters related to natural hazards but lacks the necessary implementation plan, budget and capacity to put the plan into action. It also lacks attention to conflict related preparedness needs.

Among the UN agencies, there is no comprehensive country strategy to bridge humanitarian work with medium- to long-term recovery and development. Filling this gap could go a long way to helping strengthen the place of preparedness in current and future initiatives in the country. This should be based on a comprehensive and holistic multi-hazard risk assessment.

In addition, the lack of visible donor coordination in the country makes it difficult to develop a coordinated approach to preparedness that is sustainable and multidimensional – beyond the focus of individual agencies on their respective issues/topics. Funding for preparedness continues to come from discrete DRR budgets, or as part of a package of activities in humanitarian relief. There is little donor attention being paid to the processes required to consolidate national systems for preparedness, or the funding that would be required to enable such a change.

### Definition of emergency preparedness

The definition of preparedness as used within this research is clearly defined (see Annex 7). However, there remain differences in agencies' understanding and perception of what constitutes emergency preparedness. While we encountered little resistance during the field research to the table of activities regarded as preparedness for the purposes of this report, it was confusing when donors and agencies used the terms emergency preparedness and DRR interchangeably. At the regional level (e.g. in OCHA ROAP and in Bangkok) there was greater clarity about which activities constitute DRR and which constitute preparedness. For instance, in Bangkok at the regional level it was commonly understood that cyclone shelters were risk reduction, not preparedness; in Myanmar this distinction was not so clearly articulated or commonly agreed. Overall there was a tendency for individuals and agencies to defer to discussing natural hazard-related disasters and DRR, without equal recognition or focus on emergency preparedness for conflict. Where conflict preparedness

was discussed, this was considered appropriate for only certain components in the preparedness table, in particular the physical activities such as stockpiling and training.

## Emergency preparedness: discussion

All too often agencies – including OCHA – report that the excessive burden of recurring crises means that individuals are redeployed (from emergency preparedness) to address immediate humanitarian response. Protecting the time and space required to strengthen preparedness systems therefore needs mechanisms (financial and management-based) which can ensure those responsible for preparedness activities pursue them even in the face of recurrent crises. Clearly delineated preparedness funding may help in this regard; to ensure the activities that fall under preparedness funds are pursued despite other demands and pressures. After all, preparedness efforts should not be at the expense of humanitarian response, but should complement and strengthen it.

Continued engagement with the GoM is necessary to ensure that structures and systems for preparedness retain a vision of the long term; which is to enable sustainable, nationwide preparedness systems. A national system must span from the local level through to the national level. At present international agencies are focusing largely on community and national (meaning government) entry points; there is a need to address the intermediary levels, such as the township level. Moreover, at each scale, greater attention should be paid to the range of government agencies involved. The focus on the Ministry of Social Welfare and Relief and Resettlement Department should be complemented by greater attention to other ministries that play a more significant role at the national and sub-national level.

How preparedness is understood – in terms of its contribution to development and humanitarian efforts – needs to change. Preparedness is not the exclusive remit of those working on natural hazard or conflict-related disasters. It needs to be reconceptualised as a fundamental component of Myanmar's socio-economic development trajectory; one in which a whole range of development and humanitarian activities play a part. For example, support to livelihoods must include components of preparedness, and thus be used to generate 'multiple wins' from individual investments. Given the challenging operating environment in Myanmar, as any donor will say: it is paramount to ensure maximum returns on investment. This need not require a fundamental change in programmatic activities, but an adjusted approach or incorporation of wider set of issues to optimise

sustainability. In support of this, the idea of having more integrated funding was raised by several respondents in relation to multi-donor trust funds, such as LIFT for example (discussed earlier). Elements of risk reduction are embedded in many livelihood-funded activities, but this could be extended. To illustrate, the support LIFT provides to carpenters and construction workers could include modules or skills to build disaster-resilient construction. Such skills would then be transferred beyond the life of the programme.

Evidence suggests that funding for preparedness activities is more readily available where activities are tied directly to a specific response, e.g. reconstruction, or are siloed and considered the remit of DIPECHO. There is a growing concern amongst aid workers that too little attention is paid to the broader range of activities regarded as necessary for preparedness. While progress on the MAPDRR is significant and reflects a strong GoM and international commitment to establish the policy environment for risk reduction, there is, however, a clear lack of international funding for its implementation. There are also limits to the current approach to funding which inhibit sustained support to longer-term systems for preparedness; such as to support nationwide search and rescue capacity, or systemic evacuation drills for multiple hazards at all scales, or sustained support to national and regional networks. For these purposes, current funding is too limited. In addition to encouraging an approach to development that is 'preparedness-aware', there is a need for a separate fund for preparedness. Such a fund could explicitly seek to build the capacity and effectiveness of all stakeholders required in order to support a systematic approach to preparedness across all humanitarian and development action. This is not necessarily the ideal approach to supporting preparedness; the danger is that a separate preparedness fund could create a new silo. In an ideal scenario, funding for preparedness activities would mirror their need – which is to be both part and parcel of all interventions, as well as having its own dedicated funds for activities which fall solely under the preparedness umbrella.

As part of a broader programme of engagement in Myanmar, donors must take heed of lessons from similar experiences in other countries. In May 2012, a development partner workshop was held in Mandalay to discuss the 'Busan Partnership for Effective Development Cooperation'. The lessons for ensuring effective ODA to Myanmar, while pertinent to all ODA, must equally be considered in emergency preparedness funding. This includes: strengthening of national systems, alignment with national priorities, ensuring skilled government officials/civil servants stay within the government system, effective coordination, transparency in development finance (particularly those outside the government system), sensitivity to national capacity and avoidance

of duplication. Moreover, this is also a matter of 'best fit'. Regional capacity can and should be drawn on, to strengthen Myanmar's preparedness systems in the context of a broader regional investment in capacity building.

Myanmar remains a challenging context in which to provide ODA. Despite substantial recent changes, there are serious concerns about the country's future. For example, while peace processes and signed agreements have paved the way towards a changed relationship among different factions there are also major fears about the fragmentation of the population. The government reform process is far reaching, but there are questions about the viability of its reach and effectiveness, and continued signs of fragility. For example, the renewed conflict between Buddhist and Muslim populations points to major underlying tensions. For most of the population, the slow emergence from international isolation means that with increased communications and exposure come expectations and frustrations that will need to be managed. The reform agenda – take the MAPDRR as an example – sets out idealised processes, mechanisms and activities. With limited government capacity, continued hesitancy on the part of donors to provide direct budget support, and limited exposure or experience in managing international financing, the ability to achieve the desired changes in a timely manner (at a pace that mirrors the populations rising expectations) remains a concern.

There are also raised expectations within the GoM arising from its engagement with broader international frameworks, and the likely funding flows that may result. As noted in the UN Strategic Framework (UN, 2011), Myanmar will be eligible to access an increased number of financing modalities for cross-cutting sectors, through the completion of the INC, NSDS, NCSAP and NAPA. However, with regards to the latter for instance, the pace and volume of funding to support activities outlined in national plans will – if other experiences are anything to go by – take quite some time to materialise, let alone affect change on the ground.

### Recommendations for financing future emergency preparedness

Funding for emergency preparedness should be based on an assessment of in-country needs, directly tailored to the hazard and risk context. Emergency preparedness as a discrete set of activities and approach to good humanitarian and development practice should be embedded in agency accountability frameworks (built on benchmarks against a minimum preparedness package). For emergency preparedness funding to be effective, the need/gaps within a national system of emergency preparedness must be identified, mapped against various defined scenarios and weighed against the cost – and effectiveness – of

current response capacities. Key preparedness activities can then be identified and weighted, based on the level of risk assessed, in order to prioritise and optimise funds.

Funding for emergency preparedness has to be made explicit (and potentially earmarked) as the overall mobilisation of ODA is already difficult and specific funding for emergency preparedness is inadequate – often no more than residual funds from country programmes or a humanitarian response. For emergency preparedness to be effective, preparedness funding needs to be both mainstreamed (part of an organisation's core budget) and recognised as a set of stand-alone activities. The stand-alone part needs to be funded through a percentage of development *and* humanitarian financing. The percentage of funding should be based on an assessment of risk, relative to the vulnerability and exposure of the country – and in relation to the capability and capacity of the national systems to undertake preparedness measures, i.e. based on an assessment of need. The rationale for this follows an understanding of preparedness as a continuum, which spans the humanitarian and development systems; ranging from those currently conceived as the responsibility of development agencies (e.g. the longer-term institution building) through to those regarded as humanitarian (e.g. stockpiling for response). This can be characterised as so-called 'big P versus little p' of preparedness, which requires different actors working over varying timeframes; but all with the overarching goal of supporting the development of a sustainable national system of preparedness. Thus, to build the longer-term capacity of a system (the 'big P'), emergency preparedness programming and funding is a multi-year task and should be aimed at building the capacity and independence of national systems. Although running counter to current practice, humanitarian agencies – or some humanitarian-development hybrid – must develop and pursue those activities that straddle the so-called divide (such as training and capacity building). Similarly, there is a need for – what is currently the domain of – humanitarian agencies to incorporate the 'little p' activities, which speak directly to the need for preparedness for direct response.

The set of activities that comprise emergency preparedness requires both humanitarian and development action – and thus funding should come from both sources. What must be avoided is to replicate the current humanitarian–development split under the umbrella of emergency preparedness. Emergency preparedness occupies the 'middle ground', which requires actions that span the long to near-term and must be approached in an interconnected manner.

While it remains difficult to quantify the impact of emergency preparedness activities – not least because the counterfactual cannot be known – it is more

than viable to create measures of what an effective preparedness system would look like before, during and after a disaster. In fact it is more than viable to generate tangible results from emergency preparedness financing, which should be judged against a longer-term vision of what a functioning and effective national emergency preparedness system should look like. This should not be presented as a trade-off against immediate lifesaving activities but rather as a means to be more effective at saving lives and livelihoods each time a crisis occurs.

There is therefore a need for a fundamental conceptual shift regarding funding for preparedness in Myanmar. Now is an opportune time to establish the right foundations for a developing national system and society that is adequately prepared for the range of risks and hazards to which the country is exposed. While there is understandable hesitation to provide direct budget support, ensuring the necessary policy, institutional and operational set-up exists in Myanmar – through technical assistance, software and hardware – will help to ensure that in-country development efforts align with comprehensive national policies and practice. International agencies should bring to Myanmar what is currently regarded as best practice in development and humanitarian response. For example, schools built in cyclone-affected areas should be fully cyclone-resistant, as set out in government-supported policy, which itself reflects proper standards.

Making this change requires a shift in the monitoring standards and incentive structures that prevail. To use the same example, it should be inconceivable that schools built or reconstructed in cyclone-affected areas should be anything but cyclone-proof. The trade-off is funding. While there appears to be an apparent consensus that emergency preparedness activities cost little, the reality is that extra funds are required to ensure post-disaster efforts are also key features of future preparedness. It is not yet the case that quality – of processes and/or products – are given higher regard than quantity in most monitoring frameworks currently employed. Challenging the ‘tick box culture’ and ‘number-crunching’ exercises requires a new understanding of what is an effective and pre-emptive use of funds. A preparedness programme funded and implemented before a disaster occurs may help to ensure that there is an explicit focus on preparing for the next event as opposed to merely recovering from the last, and thus put the weight of emphasis on ‘real’ life- and livelihood-saving interventions.

Based on the initial findings from the Myanmar case study, the following recommendations for financing future preparedness have been identified.

There are six main recommendations for improving financing for preparedness:

1. At present, elements of preparedness are pursued through small isolated, ad hoc interventions that do not address the need for system-wide investment in preparedness. This may require a move away from using humanitarian responses as the main means to fund preparedness activities towards more predictable funding, whether as humanitarian or development assistance.
2. Preparedness activities should be funded on the basis of a multi-hazard risk assessment. Donors and other agencies should share information and coordinate their funding to ensure an effective distribution of resources across the range of risks to which Myanmar is exposed.
3. Agencies require core funding to reflect the ‘big P, little p’ (discussed earlier) notion of preparedness and its system-wide relevance; linking across the humanitarian and development systems. Activities spanning this continuum require sustained support through predictable, multi-year funding.
4. One option is to establish a multi-donor fund with contributions from humanitarian and development agencies. This should be done with the direct intention of having a financing mechanism acting as a catalyst for more coherent action on the ground. With an emergency preparedness remit such a fund could span the ‘big P, little p’ range of activities and be based on a national strategy. This would require appropriate weighting of preparedness activities to respond in the short term as well as preparedness initiatives over the medium to long term. The latter should be aligned with GoM priorities listed under the MAPDRR.
5. There would need to be a distinction between the fund manager and recipients of any such pooled funding; the funds could be managed at the regional level. Donors would be encouraged to make multi-year contributions in order to ensure a predictable level of support to the relevant agencies at a scale that will enable real change to be affected.
6. Funding for emergency preparedness must be accessible to the full range of parties that need to be involved in establishing a sustainable national preparedness system, i.e. local, national and international NGOs, private sector, UN agencies, government ministries and departments, and other bodies. Where relevant and viable, a partnership approach should be encouraged to help build national capacity.

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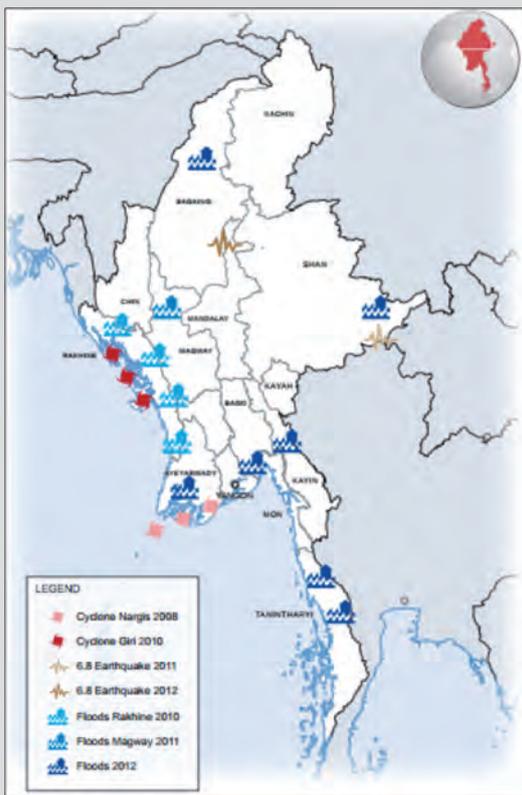
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## Annex 1. Interview list

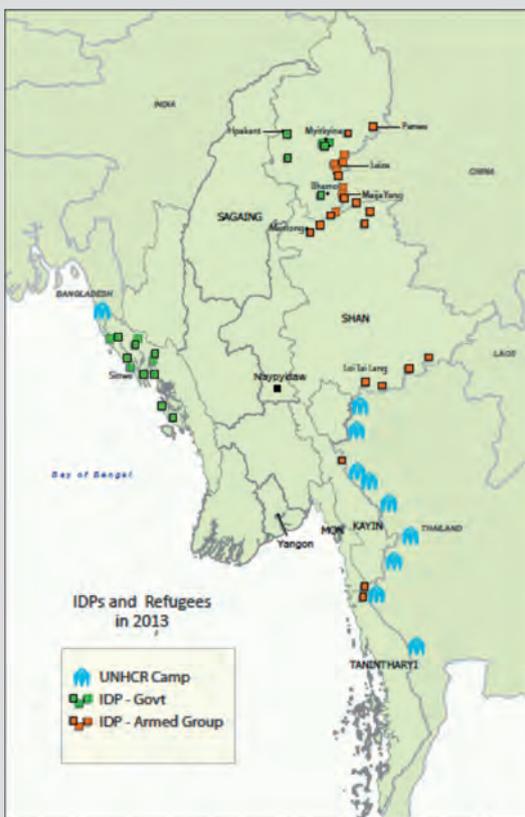
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- Mukesh Prajapati**, Humanitarian Affairs Specialist, UNFPA Myanmar
- Minister H.E. U Aung Min**, President's Office, Government of Myanmar
- Director General, Ministry of Health**, Government of Myanmar
- Deputy Director General, Ministry of Health**, Government of Myanmar
- Dr Win Oo and Dr Maung Maung Lin**, WHO, Myanmar
- Bertrand Bainvel**, UNICEF representative, UNICEF Myanmar
- Isa Kohei**, JICA, Myanmar
- Polly Newall**, Program Coordinator – Myanmar, Church World Service, Asia/Pacific, Myanmar
- Thomas Fisler**, Deputy Director of Cooperation, SDC Humanitarian Aid, South East Asia
- Shon Campbell**, MIMU Manager, MIMU, Myanmar
- BuiThi Lan**, FAO, Myanmar
- Tha Nwai Law**, Assistant FAOR, FAO, Myanmar
- Dr Sital Kumar**, Technical Expert, Danish Refugee Council, Myanmar
- Anisa Naraqi**, Policy and Program Manager, Myanmar Section, AusAID, Australia
- Sudhir Kumar**, ADPC, Bangkok
- Sajedul Hasan**, Director and Chief of Party, ADPC, Thailand
- Atiq Ahmed**, Climate Information Application Specialist, ADPC, Thailand
- Silpa Pesa**, Administration/Finance Officer, OCHA, Myanmar
- Fergus McBean**, Humanitarian Preparedness and Response Advisor, CHASE, DFID, UK
- Ilesha Singh**, Humanitarian Advisor, Conflict, Humanitarian and Security Department, DFID, UK
- Jan Willem van Rooij**, DRR Working Group Coordinator, Steering Committee of the DRR Working Group, Myanmar
- Manu Gupta**, Director, SEEDS, India
- Hiroyuki Konuma**, Assistant Director-General and Regional Representative, FAO Regional Office for Asia and the Pacific, Thailand
- Oliver Lacey-Hall**, Head, OCHA, Regional Office for Asia and the Pacific (ROAP), Thailand
- Romano Lasker**, Humanitarian Affairs Officer, OCHA, Regional Office for Asia and the Pacific (ROAP), Thailand
- David Sabai**, Liaison Assistant, OCHA, Myanmar
- Peter Paul de Groote**, Head of Mission, MSF-Holland
- Victoria Hawkins**, Deputy Head of Mission, MSF-Holland, Myanmar
- Katja Christina Nordgaard**, Norwegian Ambassador, Myanmar
- Muhammad Ahmad Faisal**, Malaysian Ambassador, Myanmar
- Kyaw Soe Hlaing**, Director, Myanmar Peace Centre, Myanmar
- Various**, Department of Meteorology and Hydrology, Government of Myanmar, Myanmar

## Annex 2. Maps of Myanmar and details of ceasefire groups



Map 1. Recent natural hazard related disasters in Myanmar

Map 2. IDP camps across Myanmar



Source: OCHA.

Map 3. Myanmar's political landscape



Source: <http://www.mmpeacemonitor.org/#!/deciphering-myanmars-peace-process/ch2>

## Ceasefire groups

Group	Clashes	Locations	Casualties
RCSS/SSA	71 clashes <sup>9</sup>	Kyaukme, Mawkmai, Mongkeung, Kunheing, Mongnai, Mongpiang, Mongton, Mong Yawng, Tachilek	RCSS/SSA report: captured 69 assorted weapons, 113 govt soldiers killed and 129 <sup>10</sup> wounded (Nov. 2011 - Jan., 2013)
SSPP/SSA	40+ clashes	Langhko, Kyauk Mae, Hsipaw, Mong Mit (Mong Ngoe), Monghsu, Kayse, Tangyan, in northern Shan State	Unconfirmed
KNPP	<10 clashes	Mawchi Township	KNPP report: 5 govt soldiers injured
DKBA-5	1 raid on military base Feb. 19, 2012	Pa'an	DKBA-5 report: 3 govt soldiers killed, 2 soldiers wounded  Two villagers injured, and one killed <sup>11</sup>
KNU	6	Papun, Hlaing Bwe, Beelin Townships	GVT + BGF attack KNLA shortly after ceasefire in January, 2012 KNU report: 8 govt soldiers killed, 2 govt soldiers injured

Source: <http://www.mmpeacemonitor.org/#!deciphering-myanmars-peace-process/ch2>

## Non-ceasefire groups

Group	Clashes	Locations	Casualties
KIA/KIO +AA +ABSDF	<b>KIO report:</b>  over 2,400 clashes since June 9, 2011  <b>Govt report:</b>  1095 clashes  <b>Battalions in Kachin state:</b>  46 bases before June 9, 2011  → 128 <sup>1</sup> or 150 after June 9, 2011 <sup>2</sup>	<b>Kachin state:</b>  Bhamo, Hpun Pyan Bum, Hpakant-Lonekhin and Lonebon, Mansi, Moenyin, Moekaung, Lajayang, Mankwi, Mongkoe, Momaok, Sinbo, Pangwa, Pangsai, Pajau-Laisin, and Waingmaw  <b>Shan State:</b> Nam San Bum mountain, Kutkai, Manton, Nant Hai, Tarmoeyne.	<b>KIO report:</b> <sup>3</sup> at least 700 KIO soldiers (June, 2011-Oct., 2012), govt soldiers killed between 5,000 and 10,000  KWAT report: IDPs over 150,000 in Kachin and northern Shan states  <b>Govt report:</b> <sup>4</sup> 35 govt soldiers killed, 190 injured. 56 attacks on railroad tracks from Mandalay to Myitkyina, 15 attacks on Myitkyina-Sumprabum road, 42 attacks on Myitkyina-Bhamo road.  Infrastructures attacked: electricity towers, 1 electric power grid, 1 power plant
TNLA	over 50 clashes	Namkham, Kutkai, Mangton, Namhsan, Kyaukme, Mongmeik	<b>PWO report:</b> 2000 villagers from 15 villages displaced. Over 100 government soldiers killed <sup>5</sup>
Unidentified group	1	Maungdaw (northern), Rakhine state	1 killed and 3 govt soldiers taken hostage by an armed group on Nov. 6.

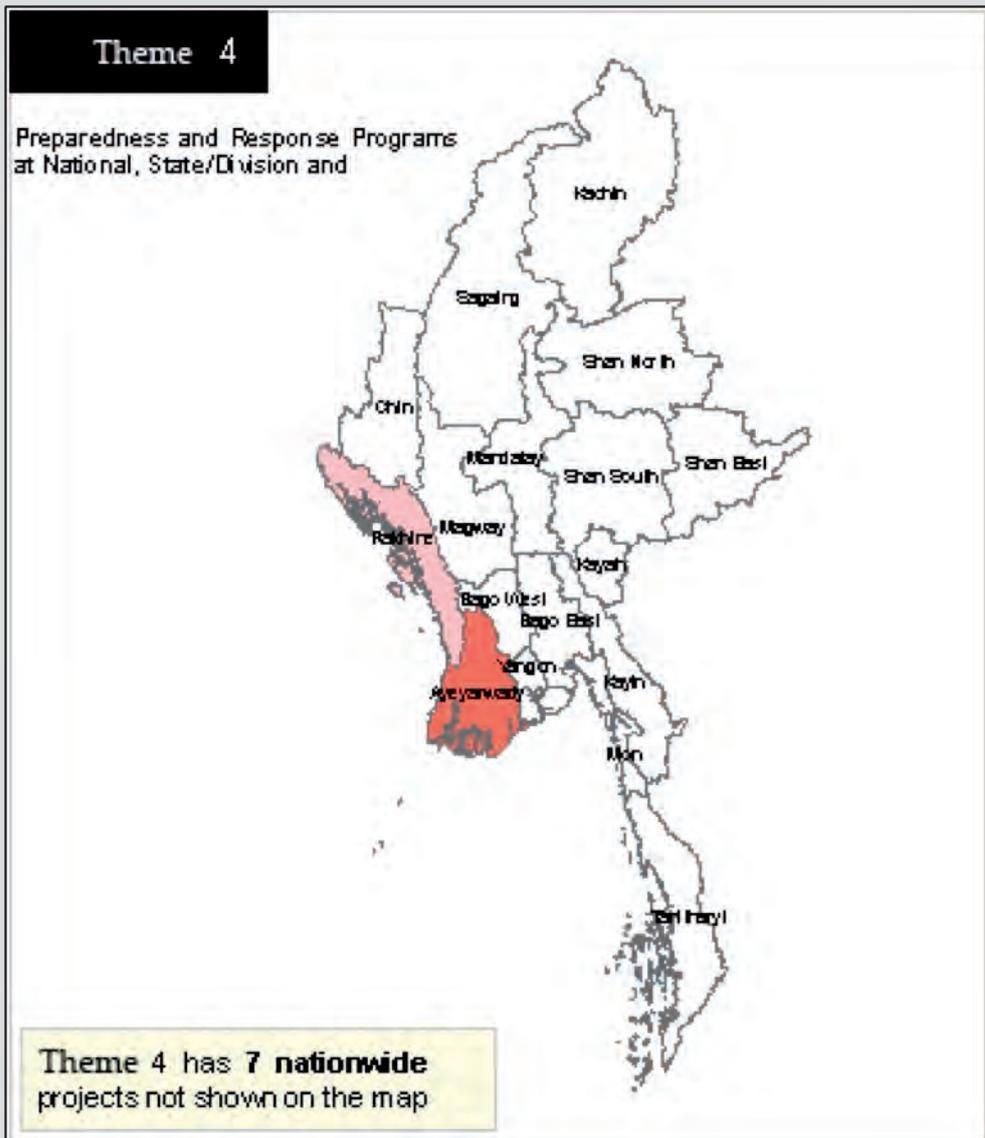
Source: <http://www.mmpeacemonitor.org/#!deciphering-myanmars-peace-process/ch2>

## Annex 3. MAPDRR 21 priority projects

Indicative budget for the 21 priority projects identified within the MAPDRR (MAPDRR Vol II, undated: 6–7), and an indicative figure in US dollars correct at time of writing (May 2013).

No.	Priority project	Budget (million Kyats)	Budget (US\$)
<b>MAPDRR component I: policy, institutional arrangements and further institutional development</b>			
1	Strengthening and capacity building of ministries and departments, division/state, district, township disaster preparedness committee	120	135,060.00
2	Implementation of standing order	155	174,453.50
<b>Total</b>		<b>275</b>	<b>309,512.50</b>
<b>MAPDRR component II: hazard, vulnerability and risk assessment</b>			
1	Risk assessment of Myanmar	180	202,590.00
2	Hazards maps of Myanmar (flood, earthquake, drought, cyclone, storm surge, fire, landslide)	305	343,277.50
<b>Total</b>		<b>485</b>	<b>545,867.50</b>
<b>MAPDRR component III: multi-hazard early warning systems</b>			
1	Upgrade of existing early warning centre.	1,595	1,795,172.50
2	Multi-hazard end-to-end warning dissemination system	210	236,355.00
3	Improve metrological, hydrological and seismological observation and forecasting	2,130	2,397,315.00
<b>Total</b>		<b>3,935</b>	<b>4,428,842.50</b>
<b>MAPDRR component IV: preparedness and response programmes at national, state/division, district and township levels</b>			
1	Multi-hazard response plan for division/state, district and township	200	225,100.00
2	Emergency operation centre	190	213,845.00
3	Review and expansion of rapid response team	235	264,492.50
4	Development of school disaster preparedness programme	290	326,395.00
5	Preparedness and response programme for psychosocial impacts, epidemic and disease control in the aftermath of natural disasters	70	78,785.00
<b>Total</b>		<b>985</b>	<b>1,108,617.50</b>
<b>MAPDRR component V: mainstreaming of disaster risk reduction into development</b>			
1	Updating and enforcement of development control law, city municipal acts and building by-laws and codes of practices.	115	129,432.50
2	Integration of disaster risk reduction in housing sector and infrastructure facilities	120	135,060.00
3	Integration of disaster risk in school and health facilities	370	416,435.00
4	Urban earthquake vulnerability reduction program	225	253,237.50
5	Flood mitigation plan for agricultural sector	16,775	18,880,262.50
<b>Total</b>		<b>17,605</b>	<b>19,814,427.50</b>
<b>MAPDRR component VI: community based disaster preparedness and risk reduction</b>			
1	Integration of community-based DRR into community development projects and promotion of cbdr volunteerism	270	303,885.00
2	Development and implementation of community-based natural resources management programs	300	337,650.00
<b>Total</b>		<b>570</b>	<b>641,535.00</b>
<b>MAPDRR component VII: public awareness, education and training</b>			
1	Awareness through school and school curriculum	220	247,610.00
2	Establishment of disaster management training school	300	337,650.00
<b>Total</b>		<b>520</b>	<b>585,260.00</b>
<b>Grand total</b>		<b>24,375</b>	<b>27,434,062.50</b>

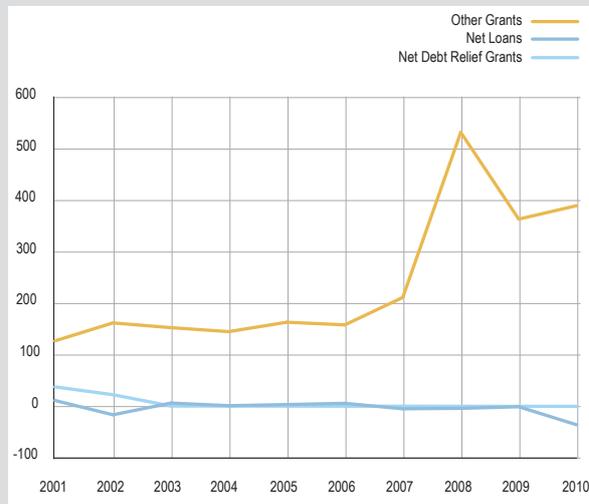
## Annex 4. Activities under Theme 4 on Preparedness



Source: ADPC and MIMU (undated).

## Annex 5. Multilateral, bilateral and sectorial ODA

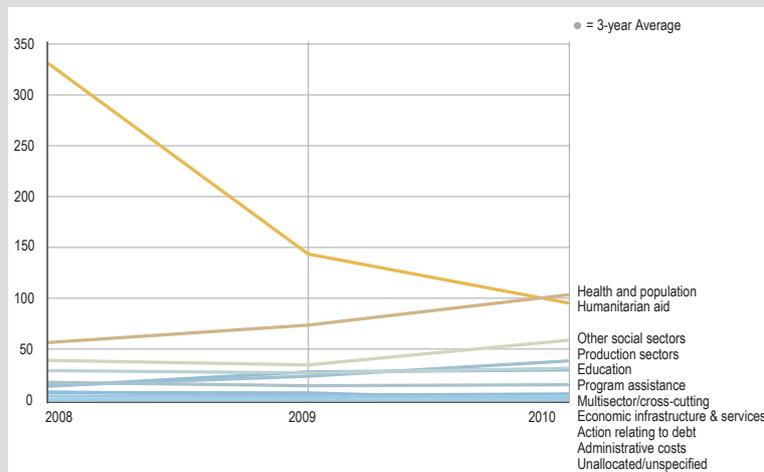
### Net ODA disbursements by type of financing (US\$ millions)



	OTHER GRANTS	NET LOANS	NET DEBT RELIEF GRANTS
2001	127.58	11.8	38.22
2002	162.47	-15.96	23.05
2003	153.23	6.85	1.17
2004	145.54	1.78	1.04
2005	163.81	3.94	0.91
2006	158.61	6.29	0.8
2007	211.91	-4.29	0.67
2008	532.46	-3.51	0.57
2009	364.03	-0.35	0.47
2010	390.09	-35.4	0.39

Source: OECD (undated) Aid (ODA) disbursements to countries and regions [DAC2a]. Available at <http://www.aidflows.org> on 29/01/2013.

### Sectoral allocations – Uses of ODA by sector (by CY in %)



	2008	2009	2010	Three year average
Action relating to debt	3.92	3.56	2.95	3.48
Administrative costs	0.52	0.37	0.27	0.38
Economic infrastructure and services	7.94	4.76	6.07	6.26
Education	28.98	26.76	31.29	29.01
Health and population	56.62	73.72	103.49	77.94
Humanitarian aid	330.79	143.57	95.53	189.96
Multisector/cross-cutting	17.41	14.11	15.12	15.54
Other social sectors	39.05	34.58	58.82	44.16
Production sectors	14.21	23.5	38.49	25.4
Program assistance	13.59	27.76	29.63	23.66
Unallocated/unspecified	7.43	7.07	0.18	4.9

Source: OECD (undated) Creditor Reporting System. Available at <http://www.aidflows.org> on 29/01/2013.

## Annex 6. ECHO projects

Channel	Description	Emergency preparedness activities
Telecom Sans Frontières	Strengthening the humanitarian response system through the reinforcement of relief organisations capacities in telecommunications and information technology	Communication systems
UNHCR	Enhancing coordination of camp management and camp coordination interventions in emergencies	Inter-agency coordination, cluster/sector established contextual standards, cluster/sector information management systems
UNICEF	Strengthening the capacity for effective and timely support to large scale emergencies and humanitarian capacity development in the areas of global child protection and gender based violence, and nutrition cluster	Inter-agency coordination, cluster/sector established contextual standards, contingency/preparedness and response planning, accredited training opportunities
Norwegian Refugee Council, HelpAge International, Merlin UK	Assessment Capacities Project (ACAPS),	(No preparedness activities identified)
UNOCHA	Supporting the international humanitarian actors in delivering a more effective response	Government coordination mechanisms, national/sub-national leadership structures, inter-agency coordination – national and sub-national, cluster/sector established contextual standards, cluster/sector information management systems, contingency/preparedness and response planning, accredited training opportunities, contingency partnership agreements
WFP, FAO	Establishment of the Global Emergency Food Security Cluster	(No preparedness activities identified)
UN ISDR	Strengthened ISDR partnerships for accelerated implementation of the Hyogo Framework for Action (HFA)	(No preparedness activities identified)
ACF	Improving nutrition programmes through the promotion of quality coverage assessment tools, capacity building and information sharing	(No preparedness activities identified)
UK Red Cross	Humanitarian preparedness and response is more effective at meeting the diverse needs of affected people through increased capacity to deliver appropriate cash and vouchers in the humanitarian sector	(No preparedness activities identified)
Finnish Red Cross	Increasing awareness of international humanitarian law (IHL) and humanitarian principles among European humanitarian organisations and their implementation partners working in conflict prone or post-conflict countries	(No preparedness activities identified)
IRC	SAFER for Children – Strengthened Action for Emergency Response for Children	(No preparedness activities identified)
MDM – Belgium with MDM FR; Memisa (Belgium); Merlin UK; PU-AMI; Save the Children-UK	Strengthening the capacities of humanitarian organisations to procure and deliver medicines of assured quality in their programmes	(No preparedness activities identified)
BBC Media Action	Enhancing capacity to communicate with crisis-affected populations	(No preparedness activities identified)
DanChurchAid - DNK	Multi Regional Security Risk Management Capacity Building: Phase II	Accredited training opportunities, specific country context training opportunities
Oxfam	Building institutional capacity for timely food security response to slow onset crises at scale	(No preparedness activities identified)

Note: manual coding of preparedness activities undertaken by ECHO Myanmar.

## Annex 7. Definition and categories of emergency preparedness

### Emergency preparedness: a definition

The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards (including conflict and epidemics).

This entails readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training, community drills and exercises) and institutional preparedness (coordination arrangements, early warning systems, public education) supported by legal and budgetary frameworks.

Source: ODI Inception Report, November 2012

### Preparedness matrix: Categories of emergency preparedness

Hazard/risk analysis and early warning	<ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard/risk analysis</li> </ul>
Institutional and legislative frameworks	<ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>
Resource allocation and funding	<ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>• Government coordination mechanisms</li> <li>• National/sub-national Leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster/sector established contextual standards</li> </ul>
Information management and communication	<ul style="list-style-type: none"> <li>• Information Management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster/sector information management systems – GIS, 3/4Ws</li> </ul>
Contingency/preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness</li> <li>• Contingency/preparedness and response planning</li> </ul>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and/or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>
Emergency services/standby arrangements and prepositioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>

# Case study: financing of emergency preparedness in Niger

*Patrick Robitaille, Eva Comba and Fabien Richard*

## Executive summary

This paper provides an overview of emergency preparedness activities and financing in Niger. The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards. This entails readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training, and community drills and exercises) and institutional preparedness (coordination arrangements, early warning systems, and public education) supported by legal and budgetary frameworks (ODI, 2012).

Emergency preparedness is a crucial issue for Niger, which is extremely vulnerable to recurring natural hazards such as droughts and floods, insect infestations and epidemics. The political situation in Niger is fragile and greatly affected by instability in the region, including related to Islamic militant groups in neighbouring countries. Natural hazards are coupled with high levels of vulnerability linked to food insecurity, pervasive poverty and high rates of population growth, which exacerbate disaster risks and raise concerns about the country's ability to tackle them.

Disaster Risk Management (DRM) has been progressively incorporated into sectoral and national policies, strategies and plans in Niger. The government has developed a comprehensive system for addressing food insecurity, including preparing for and responding to food security crises, called the 'Dispositif'. Established in 1998, the Dispositif includes strong preparedness, early warning, mitigation and response components. While the Dispositif is the main body for national government emergency preparedness, it is not fully operational to respond to disasters beyond those related to food insecurity.

## Scale and scope of emergency-preparedness activities

An increasing number of preparedness activities and programmes are implemented by the Dispositif, particularly in the food security sector. Most of these are focused on improving early warning systems, risk and need analyses, strengthening food reserves and stocks, and enhancing coordination and resilience to shocks. While there is general sentiment that risks related to food security are reasonably

well addressed, preparedness efforts for other risks, such as floods, epidemics and population migrations, remain inadequate, despite some recent progress.

International aid agencies and donors in Niger place importance on disaster response management. The frameworks and strategies that guide international engagement in Niger are replete with references to risk, and feature preparedness components. This includes both short-term humanitarian appeals and long-term development frameworks, such as the Consolidated Appeal Process (CAP), United Nations Development Assistance Framework (UNDAF) and development banks' country strategy papers.

Numerous international agencies and donors support emergency preparedness. Broadly speaking, UN agencies and donors tend to focus on enhancing government preparedness at the national level, mainly through early warning, risk and need assessment, pre-positioning, contingency planning and coordination, while the focus of NGOs is more on preparedness at the community level. Gaps include investment in sub-national and local preparedness, as well as preparedness for floods, epidemics and conflict. The approach to preparedness is highly fragmented, with activities spread out in different sectors and regions. Preparedness activities are often subsumed within the wider development or humanitarian agenda of individual agencies. No common preparedness plan exists to improve coherence and guide international engagement in preparedness, which makes gaps and duplications harder to avoid.

## Emergency preparedness financing

Discreet emergency preparedness projects and activities with emergency preparedness components have been supported through a wide variety of humanitarian and development financing channels. A considerable part of the national budget and international aid going to preparedness is through the Dispositif and its support plan. Between June 2012 and November 2013, the estimated planned expenditure was US\$4.21 million, of which the national government would provide 33%, the EU 46% and other partners 21%.

Climate financing is another source of funding for emergency preparedness. The Pilot Program for Climate Resilience (PPCR) delivered US\$110 million to Niger

through different projects, some of them incorporating emergency preparedness activities. Managed by the Global Environment Facility, the Least Developed Country Fund (LDCF) has channelled US\$50.7 million since 2005 to support the implementation of four projects to build adaptation to climate change, some of which include emergency preparedness components.

The CAP is the main channel for humanitarian support to emergency preparedness. Approximately 63% of the projects in the 2013 CAP (which had a total budget of US\$354 million) had emergency preparedness components. Analysis of these projects suggests that about US\$48.2 million of the 2013 appeal was for emergency preparedness – not an insubstantial amount. Humanitarian pooled financing mechanisms have not contributed significantly towards emergency preparedness. The only humanitarian pooled fund providing financing to Niger is CERF, which has funded only a small number of projects (worth approximately US\$3 million) that include emergency preparedness components. As the CERF prioritises underfunded emergencies and life-saving interventions, it is not likely to emerge as a major avenue for preparedness funding.

Emergency preparedness, even if not articulated clearly, appears to be a priority for many international agencies. Interviews suggest that most agencies do not separate preparedness activities from mainstream humanitarian interventions, but rather consider them as part and parcel of their existing work. Several international NGOs reported that elements of ‘core funding’ go towards coordination, information management, emergency planning and local training. Donor agencies, too, estimated that portions of their core funding supports national strategies and plans, including some emergency preparedness elements. UN agencies also reported that core funds are used to support elements of preparedness, including cluster coordination, contingency planning and government capacity-building.

A cost–benefit and cost–effectiveness analysis for emergency preparedness in Niger provides indicative evidence that there is a financial imperative for greater investment in effective preparedness. In the most conservative scenario, it is estimated that US\$3.25 of benefit is generated for every US\$1 spent on preparedness. This increases to as high as US\$5.31 of benefit for every US\$1 spent in the least conservative scenario. The analysis found that the monetary benefits of investing in preparedness in relation to drought – assuming that it is implemented in a manner that delivers the expected gains – clearly outweighs the costs.

## Conclusions

Funding of emergency preparedness in Niger is complex, owing to the many channels, donors and mechanisms

through which emergency preparedness is financially supported. Many emergency preparedness activities are funded via wider development and humanitarian initiatives, which makes it difficult to track preparedness financing and determine concretely the levels of investment in preparedness. The development of an emergency-preparedness tracking tool could help clarify the picture by identifying the needs and gaps in preparedness funding.

The fragmented nature of the international system and financing channels results in a lack of coherence, cohesion and coordination in the preparedness sector in Niger. The development of a clear plan of action for emergency preparedness is required to clarify the needs and financing requirements, as well as to delineate the roles and responsibilities of each actor in this sector. The favourable cost–benefit analysis of investing in preparedness clearly suggests a fiduciary duty on the part of donors and the Niger government to focus more on emergency preparedness. While the difficulty of tracking financing poses challenges to understanding its precise volume compared to what is required, the findings in this report strongly suggest that more funding in scale and scope is needed to improve the state of emergency preparedness in the country. Other changes are also required, including ensuring the effectiveness of preparedness activities, increasing coherence and coordination and prioritising preparedness.

## Recommendations

### Focusing on the gaps

To fill existing gaps in the preparedness sector, national and international actors should:

- Build the long-term capacity of the government to respond efficiently to all risks by:
  - Comprehensively expanding the preparedness considerations included in the different national policies, strategies and plans beyond food insecurity.
  - Supporting initiatives and structural changes to ensure organisational coherence, cohesion, transparency and efficiency of the Dispositif, including the institutional inclusion of entities managing other risks (i.e. floods, epidemics and population migration) within the Dispositif.
  - Channelling additional funds to actors involved in specific preparedness activities for other types of disasters, such as the Ministry of Health and Civil Protection.
  - Participating in the revision, implementation and financing of the national multi-risk contingency plan and the health contingency plan.
- Improve preparedness at the local level by:
  - Undertaking an assessment of sub-national and local disaster preparedness needs.
  - Increasing human and logistics capacities of local authorities through capacity-building initiatives and

the development of regional and local contingency plans.

- Increasing financial support to local authorities and devoting more funds to preparedness initiatives focused on the local and community level.
- Encouraging the participation of local authorities and communities at all stages of the Dispositif system.
- Improving community-level early warning information and systems.

### Improving coordination and coherence

Improving the coherence and coordination of preparedness activities would reduce duplication and gaps, as well as foster a more effective and comprehensive approach to preparedness. The government, donors and national and international aid agencies should pursue this by:

- Prioritising preparedness in strategies, plans of action and projects.
- Clearly identifying and distinguishing specific preparedness activities included in broader development and humanitarian projects.
- Creating a preparedness tracking tool to better identify and analyse the needs and gaps in preparedness activities and funding.
- Elaborating a common specific action plan for preparedness involving all stakeholders, which will clarify needs and funding requirements, identify actors present in the preparedness sector and articulate their roles and responsibilities.

### Encouraging donor investments in preparedness

Transformational changes would be key to increasing funding opportunities for emergency preparedness. These changes include shifting the cultures of donors and implementers from 'response' to 'prevention and preparedness', and bridging gaps between humanitarian and development agendas where possible. These changes could be encouraged by:

- Increasing the visibility of preparedness actions through developing and publicising a country risk assessment and a preparedness need assessment.
- Understanding the importance of preparedness activities as part of efforts to enhance long-term resilience.
- Highlighting the benefits of *ex ante* expenditure and building the business case for investing in preparedness.
- Seeking funding opportunities beyond the main OECD Development Assistance Committee (DAC) donors present in Niger and pursuing opportunities for financing through funding mechanisms focused on climate change and DRR.
- Increasing advocacy for improving emergency-preparedness financing in Niger and globally.

## Introduction: the risk context

### Overview

Niger is a vast landlocked country located in the Sahel Region in western Africa. Most of its 17 million inhabitants live in the narrow band of arable land near its southern border. While modest development gains have been made in recent years, 60% of Niger's population lives below the poverty line, making it one of the poorest countries in the world. It ranks 186 out of 187 countries in the 2012 United Nation Development Programme (UNDP) Human Development Index (<http://hdr.undp.org/en/statistics/>).

This paper provides an overview of emergency preparedness activities and financing in Niger. The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards. This entails readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training, and community drills and exercises) and institutional preparedness (coordination arrangements, early warning systems, and public education), supported by legal and budgetary frameworks (ODI, 2012).

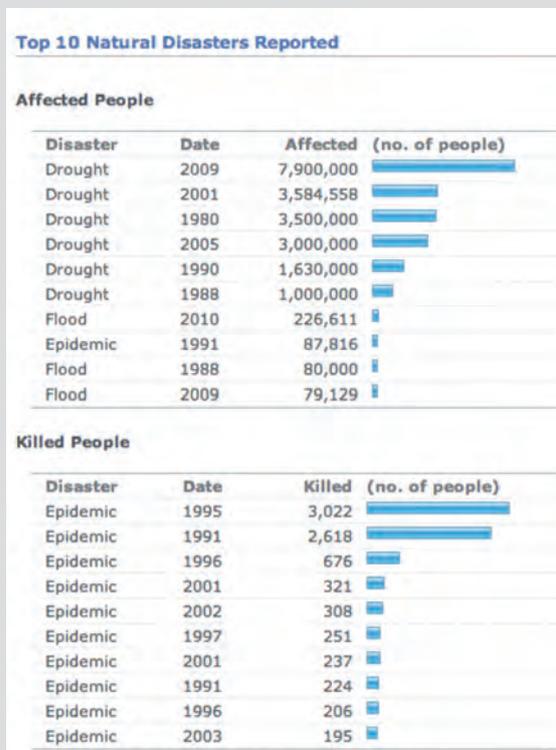
### Natural hazards

Niger faces recurring natural hazards such as droughts and floods, insect infestations and epidemics. Between 1980 and 2010, 21 million people were affected by hazards (OFDA/CRED, n.d.a). Amongst natural hazards, droughts affect the greatest number of people in the country. Significant droughts occurred in 1990, 2001, 2005 and 2009, affecting 1.6 million, 3 million, 3.5 million and 7.9 million people respectively, according to the OFDA/CRED International Disaster Database. Environmental fragility, rapid population growth and extreme poverty combine to constrain the population's ability to cope with and recover from droughts (Cabot Venton and Coulter, 2013).

Floods are an increasing risk in Niger due to changes in rain patterns and a sharp increase in the number of people living in flood-prone areas. In 2012, the worst floods in decades hit the country, affecting 530,000 people (Cabinet du Premier Ministre, 2012). Flooding has been particularly severe in the Tillabéri, Niamey, Dosso, Maradi and Diffa regions. Heavy rains have caused overflowing of the Kimadugu River on the border with Nigeria, and of the Niger River in the capital city, Niamey.

Epidemics are the most recurrent hazard in Niger and have resulted in the greatest loss of life (see Figure 1).

**Figure 1. Natural disasters with greatest numbers of affected persons and recorded deaths (1980–2010)**



Source: CRED (<http://www.preventionweb.net/english/countries/statistics/?cid=125>)

Diseases with high epidemic potential occur frequently (WHO, 2006a). In 2012, by October, 4,800 cases of cholera and nearly 100 deaths were reported, as were 2.4 million cases of malaria and 2,857 deaths. Given high rates of undernutrition and poor sanitation and hygiene, the risk of health crises will remain high.

### Conflict-related hazards

The political situation in Niger is fragile. In 2009, the then President Tandja attempted to circumvent a two-term limit, resulting in a political crisis that led to a military coup in February 2010. A new president took office in 2011, following the adoption of a new constitution and local, legislative and presidential elections (World Bank, 2013). Niger and neighbouring Mali have faced periodic uprisings by Tuareg since the 1960s. Niger is greatly affected by the current instability in the region, with Islamic radical groups such as Al-Qaida in Islamic Magrheb (AQMI) becoming increasingly active in neighbouring countries, especially Mali. Conflicts in Mali and Nigeria have caused inflows of 62,000 Malian refugees, more than 3,000 Nigerian refugees and thousands of Nigerian economic migrants (NRC/IDMC, 2011; OCHA, 2013). Violent extremism, illicit trafficking and terrorist security threats are increasing. In May 2013, two suicide attacks from jihadists, one on

the military camp of Agadez and another in the French-operated uranium mine of Arlit, killed 26 and injured 30 people.

### Vulnerability

In Niger, recurrent hazards are coupled with high levels of vulnerability linked to food insecurity, pervasive poverty and high rates of population growth. The country has an annual growth rate of 3.6% and a total fertility rate of 7.6 births per woman – the highest fertility rate in the world (USGS/USAID, n.d.). At the same time, the country faces stagnating agricultural production, which contributes to high levels of food insecurity and is exacerbated by recurring droughts and insect infestations. Between 15% and 20% of the population is classified as food insecure, and more than half of all children under 5 y.o. are chronically malnourished (UNICEF, 2013). Since its independence, Niger has witnessed agricultural deficits and food crises in numerous periods. Food insecurity is a primary driver of vulnerability to the negative impacts of shocks.

The 'World Risk Report 2012' ranks Niger as the second most vulnerable country to natural disasters out of 170 countries (Alliance Development Works (2012). Vulnerability to natural disasters is characterised by a high level of susceptibility coupled with lack of coping and adaptive capacities. Niger is ranked as the fifth most susceptible country, meaning that an extreme event triggered by a natural hazard would be very likely to cause harm, loss and disruption in Nigerien society. High susceptibility is caused by factors including poor infrastructure and housing conditions, high rates of undernutrition, low economic capacity and high prevalence of poverty. The report found Niger's capacity to minimise the direct negative impacts of present and future natural hazards and climate change to be very limited. Poor governance also influences the government's ability and willingness to tackle natural hazards and insecurity; Niger is ranked amongst the top 20 countries in the 'Failed States Index 2012' (FP, n.d.).

### Implementing preparedness in Niger: national architecture, actors and activities

#### DRM in national policies and strategies

In the context of prevalent food insecurity and recurrent food crises, disaster risk management (DRM) and emergency preparedness have emerged as priorities for the government of Niger. They have been progressively incorporated into sectoral and national policies, strategies and plans.

### DRM in food security strategies

Since the early 1990s, the recurrence of acute food crises led to the publication of several policies, strategies and programmes to promote food security and respond effectively to crises. Summarised in Table 1, these strategies feature disaster management components and include some elements of emergency preparedness.

The most recent food security strategy is the 3N Strategy. Established in April 2012, '*Les Nigériens Nourissent les Nigériens*' [Nigeriens Nourish Nigeriens], was put in place under the leadership of the president to address food insecurity (Embassy of Niger, n.d.). It includes the objective 'to improve the resilience of the population facing climate change, crisis and disasters', which encompasses three activities linked to preparedness:

- improving the effectiveness of early warning and the coordination of emergency interventions;

- providing appropriate and adequate responses in emergency situations; and
- developing a risk-management plan that incorporates various types of risks faced by producers, households and communities.

As part of the implementation of this 3N strategy, support plans were established for 2012 and 2013 to increase access food and protect the livelihoods of at-risk households. The plans intend to improve the existing crisis prevention and management system in Niger, with a focus on food crises and natural disasters such as floods, droughts, epidemics and insect infestations (Plan de soutien 2013). While this study was not able to gauge the level of financial support to the plan, it is an entry point for supporting emergency preparedness related to food insecurity.

**Table 1. National food security and poverty reduction strategies relevant to emergency preparedness**

Strategy	Year	Description and objectives relevant to preparedness
<b>Food security</b>		
Guiding Principles for a Rural Development Policy	1992	Highlights the recurrence of droughts, natural resources degradation, lack of institutional set up to deal with crises and lack of household coping capacities <sup>(1)</sup> Commitment to finding solutions to food insecurity Emphasis on the need for an efficient early warning system
Food Security Operational Strategy	2000	Address the lack of coherence between food crisis prevention and sectoral development policies Find sustainable solutions to food crises
Food Security Complete Programme	2000	Address risks related to food insecurity Developed in collaboration with FAO
Food Security National Strategy	2001	Alleviate hunger by 2015 Build capacity for disaster management
Food Security Global National Programme	2003–2004	Coordinate all food security initiatives in Niger Emphasis on preventing and mitigating food crises, managing negative impacts on the environment and improving the national early warning system
3N Strategy – Nigeriens Nourish Nigeriens	2012	Improve the resilience of the population facing climate change, crisis and disasters Improve early warning and emergency response coordination; provide appropriate emergency responses; develop risk management plan
<b>Poverty reduction</b>		
Poverty Reduction Strategy	2002	Highlights the importance of natural disasters, insect infestation and environmental degradation and their link to poverty and vulnerability
Rural Development Strategy	2003	Seeks to protect rural livelihoods through the sustainable management of natural resources and disaster response management
Poverty Reduction Strategy Paper (PRSP)	2008–2012	Articulates preparedness as a strategic priority for Niger (IMF, 2008) Seeks to reinforce weather observation and surveillance networks, improve weather and climatic data, increase the availability of weather and climatic products and rehabilitate equipment
Economic and Social Development Programme	2012–2015	Strategic objectives on food security, social development and preservation of natural resources include preparedness elements

Notes: (1) Principes Directeurs pour une Politique de Développement Rural pour le Niger (PDPDR).

### DRM in poverty reduction and development strategies

Poverty reduction and development strategies have included objectives related to disaster response management and to a lesser extent preparedness (see Table 1). As their goal is poverty reduction, it is not surprising that their focus is most strongly on long-term solutions to food insecurity and structural responses to cyclical crises. The most recent poverty strategy is the Economic and Social Development Programme (PDES) 2012–2015, which is the successor to the 2008–2012 Poverty Reduction Strategy Paper.

The PDES represents the single frame of reference for economic and social development both for the government and for the technical and financial partners. Its strategic objectives on food security, social development and preservation of natural resources include preparedness elements. The food security objective includes programmes focused on improving crisis coordination and management mechanisms, encouraging adaptation of response to crises, coordinating sectoral policies and mobilising funding. The strategy states that the principle food security challenge to be met is transitioning from a situation of cyclical management of recurring food crises to more structural responses for promoting sustainable food security and agricultural development (particularly through the 3N initiative). The social development objective includes a programme focused on improving the efficiency of the health system to respond to health crises and epidemics. The natural resources objective has a programme that includes strengthening adaptation and resilience. Thus, while the overall focus of the strategy is on poverty reduction, there are elements of emergency preparedness within the PDES.

### DRM in other programmes and strategies

Other development programmes and strategies touch on disaster risk, including the National Action Programme for the Fight against Desertification and Natural Resources Management, the Biodiversity National Strategy and Action Plan, the Water and Sanitation Strategy and Policy for Sustainable Development and the Environment National Plan for Sustainable Development. Translating policies into progress has been a challenge. A 2011 review of the National Action Programme for the Fight against Desertification and Natural Resources Management found that the government had taken several notable actions to combat desertification and that NGOs were making some progress, but that overall there had been no significant progress towards combating desertification through governmental activities, primarily due to fiscal constraints (Snorek *et al.*, 2011).

The Nigerien government has taken steps to address climate change. It set up the National Technical Committee on Climate Changes and Variability (CNCVC) in July 1997

and presented its Initial National Communication in 2000.<sup>1</sup> The National Adaptation Programme of Action (NAPA) was subsequently developed by the National Council for Environment and Sustainable Development in 2006; the NAPA outlines Niger's priority activities to adapt to climate change. Amongst the 14 priority projects, four are closely linked to DRM and four others are directly related to emergency preparedness. The latter include the setting up of food banks and security stocks that can be used by agro-pastoral households in times of crises, producing and disseminating agro-meteorological data to better predict crises, creating an alert system, and trainings to tackle climate-sensitive diseases more efficiently.

### National architecture and actors

#### Evolution of national DRM and emergency preparedness institutional frameworks

The national architecture for disaster risk management has gone through numerous iterations since the 1970s. In 1974, following a severe food crisis, a ministerial department in charge of rural economy, climatology and assistance was created to address the issue,<sup>2</sup> which was replaced a year later by an inter-ministerial committee in charge of agro-pastoral livelihoods and food aid coordination.<sup>3</sup> In response to food crises in 1984–1989, it became a multidisciplinary technical committee tasked with coordinating food aid under the supervision of the Ministry of Commerce, Industry and Transport.<sup>4</sup> The succession of food crises was also the starting point for the country's early warning system. In 1989, a National Committee of Early Warning System (CNSA) was created. In 1995, the mandate of the CNSA (subsequently called the *Système d'Alerte Précoce*, or SAP) was extended to include disaster management. In 1998, SAP was integrated into the broader structure in charge of prevention, disaster management and food crises called the *Dispositif*.<sup>5</sup>

### The Dispositif

Since its creation in 1998, the *Dispositif* has become the central body for dealing with disasters in general, and food insecurity in particular. The objective of the *Dispositif* is to reduce vulnerability to food crises by improving the coordination and management of actions and actors. In 2012, its mandate was extended from food security

<sup>1</sup> All parties to the UNFCCC must report on their steps they are taking to implement the convention itself. The 'initial communication' is a country's first report.

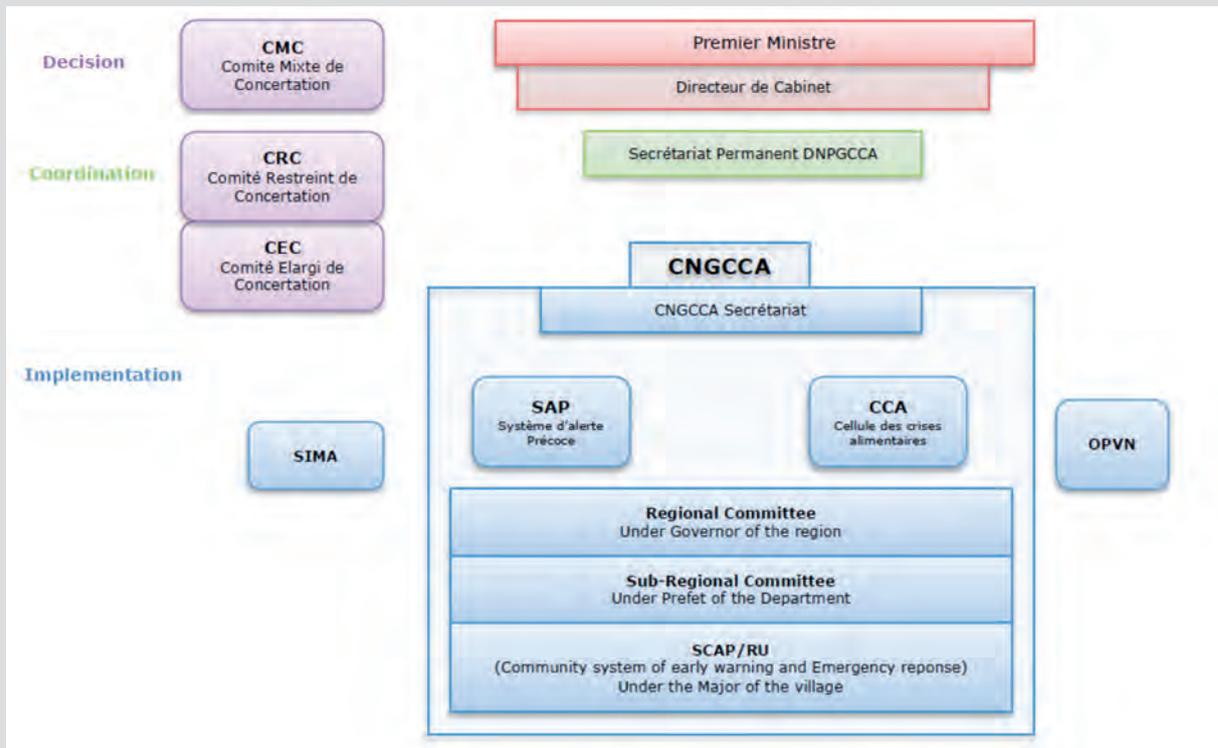
<sup>2</sup> *Département ministériel chargé de l'économie rurale, de la climatologie et de l'aide aux populations* (ordonnance n°74-02 du 22 avril 1974).

<sup>3</sup> *Comité interministériel de suivi de la campagne agropastorale et de coordination de l'aide alimentaire* (arrêté n°26/CMS/PM du 10 septembre 1984).

<sup>4</sup> *Comité technique pluridisciplinaire de suivi et de la coordination de l'aide alimentaire*

<sup>5</sup> *Dispositif National de Prévention et Gestion des Catastrophes et des Crises Alimentaires* (DNP-GCA)

Figure 2. Organisational structure of the Dispositif



to disaster prevention and management for all natural hazards.<sup>6</sup> At present it is the main focal point for DRM and emergency preparedness in Niger. The Dispositif comprises multiple structures (see Figure 2), elucidated below.

- The *Comité Mixte de Concertation* (CMC), which supervises the orientation of the Dispositif, includes the Prime Minister of Niger and 13 donors represented by donor country ambassadors and UN agencies' country representatives. It is the highest platform for discussions between national actors, donor countries and international agencies.
- The *Comité Restreint de Concertation* (CRC) is composed of representatives from the donors and UN agencies that are members of the CMC. The CRC takes operational decisions and liaises directly with the Office of the Prime Minister.
- The CRC is supported by a larger group of 33 stakeholders, called the *Comité Élargi de Concertation*, which includes donors, ministries, technical agencies, UN agencies, NGOs and regional organisations.
- The Disaster and Food Crisis Prevention and Management National Committee (CNPGCCA)<sup>7</sup> is in charge of ensuring the implementation of regional and sub-regional committees, which provide operational and strategic guidance at the local level for disaster

management. It coordinates the SAP and the *Cellule Crise Alimentaire et Gestion des Catastrophes* [Food Crisis and Disaster Management Unit] (CCAGC). In 2012, a permanent CNPGCCA secretariat, directly linked to the Office of the Prime Minister, was created to coordinate all structures of the Dispositif by providing services such as administration, evaluation, communication and internal auditing.

- SAP is the public body responsible for risk analysis and assessments on need and vulnerability; it provides meteorological predictions and collects agricultural, livestock and socio-economic data.<sup>8</sup>
- The CCAGC is responsible for the implementation of food security programmes. These activities are developed in collaboration with UN agencies such as the World Food Programme (WFP), the Food and Agriculture Organization of the United Nations (FAO) and national and international NGOs.

Other arms of the Dispositif are the *Office des Produits Vivriers du Niger* (OPVN) and the national *Système d'information des marchés agricoles* (SIMA). Managed

<sup>6</sup> *Programme d'Appui au Secteur Sécurité Alimentaire au Niger Appui au Dispositif National de Prévention et de Gestion des Catastrophes et Crises Alimentaires.*

<sup>7</sup> *Comité national de prévention et de gestion des catastrophes et crises alimentaires (CNPGCCA)*

<sup>8</sup> SAP comprises six units: Alert; Follow-up and Research; Prevention and Disaster Risk Reduction; Partnership and Capacity Building; Statistics and Information Technology; and Administration/Finance/Accounting. The SAP's coordination unit participates in the creation of a national emergency plan to deal with disasters and food crises and a working group (GTI/SAP) has been created to involve various actors in the early warning system. This group includes all actors responsible for the different sectoral information systems, such as the National Health Information System (SNISS), the Cereal Market Information System (SIM/C), the Livestock Prices Information System (SIM/B), as well as technical ministries.

by the Ministry of Economy and Commerce, the OPVN receives purchase orders from the CCAGC and manages the purchasing of the food and the warehousing. SIMA examines harvest productivity across the country and monitors market prices.

- The Dispositif can use two main intervention tools in times of crises: the Donor Common Fund [*Fonds commun des donateurs*] which can be mobilised to mitigate localised food crises, and the National Reserve Stock [*stock national de réserve*], which consists of stocks in cash and in kind (amounting to approximately 110 tonne of cereals) that can only be used during severe national or regional crises.

The Dispositif is operating relatively well compared with other national systems for crisis prevention and management in the Sahel. The early warning system appears to be relatively efficient, with good coordination amongst different stakeholders. Partnerships promote multi-sectoral responses, and joint technical support missions are regularly organised. The media is also involved in awareness-raising campaigns across the country.

However, the Dispositif also faces several challenges. International actors, and in particular donors, have disproportionate influence in decision-making compared to the government, owing to their strong representation in the Dispositif committees. The Dispositif involves several sub-bodies, numerous technical, financial and operational partners, and is supported by a series of ministries, technical services, donors, NGOs and other civil society organisations. While this promotes representation and inclusiveness, the large number of actors makes the system difficult to grasp and increases bureaucracy.

Another major challenge is promoting disaster preparedness at the community level. Stakeholders consulted indicated that the flow of information between the capital and the field is poor. Implementing partners at sub-regional and local levels have very limited human, logistical and financial resources. Many stakeholders outlined the importance of the preparedness work done at sub-regional and local levels because leaders (e.g. *Préfets* and mayors) are directly elected and therefore more accountable to local populations than governors (who are nominated by the national government). The participation of local authorities therefore needs to be encouraged, and programmes should be inspired by local knowledge and practices through direct engagement with communities.

Other weaknesses include coordination (both within the Dispositif and with actors outside of it), transparency and the need to better understand the effectiveness of actors and actions through evaluation. The Dispositif has been increasingly successful in managing crises related to drought and food access, but much work remains to be done in order to respond to floods, epidemics and

population migration. The body tasked with managing these other risks and hazards is separate from the Dispositif and not led by the permanent secretariat. This has prompted some actors to advocate for its institutional inclusion in the Dispositif in order to increase the coherence of the system.

## Coordination of national and international engagement

Given the growing number of aid actors involved in crisis prevention and management, agreements have been developed to coordinate national and international engagement in this sector. The National Plan for Prevention and Management of Food Crisis was developed alongside the Dispositif in the late 1990s, laying the foundation for the coordination and management of crises in Niger. In 2005, a Framework Agreement was established between donors and the national government called the *Accord-Cadre*, outlining the distribution of responsibilities between the Nigerien government and donors for the prevention and management of disasters. This signatories to the *Accord-Cadre* were the Prime Minister and the 13 donors represented in CMC.

Coordination between national and international actors is also promoted by the cluster system. Clusters are coordination bodies focused on specific humanitarian sectors that aim to foster coherence and coordination of humanitarian responses. In Niger there are clusters on education, emergency telecommunications, food security, health, logistics, nutrition, protection and WASH. Clusters are co-led by government ministries and UN agencies; their membership includes donors and international and national NGOs.

## National emergency preparedness plans and initiatives

The government and its partners have developed contingency plans to deal with a range of disaster risks. A National Multi-Risks Contingency Plan was elaborated in July 2012 by SAP in collaboration with OCHA, UNDP and other Inter-Agency Standing Committee (IASC) members. This plan includes scenarios related to drought, flooding, epidemics and population movements, and provides a framework of responses, including objectives and capacities of stakeholders. While potentially an important step towards increasing preparedness for all types of risks across sectors and regions, operationalising the plan remains a serious challenge. At the time this research was conducted, it had not been used since its release, despite an opportunity to use it in response to the damaging flooding in August 2012. The plan lacks key components that would promote its implementation, and some interviewees expressed that the plan was poorly communicated and disseminated. A concrete plan of action and improved capacity and budget analysis are needed in the new version of the National Multi-Risks Contingency Plan.

The Ministry of Health, supported by WHO, has established its own contingency plan for 2011–2015. This plan includes an assessment of health sector infrastructure, policies, equipment and human resources. While the contingency plan is clearly articulated, a challenge is the lack of capacity to ensure the management of the vaccines and supplies. Once there is a declared epidemic, very few operational actors are able to support the Ministry of Health. A stronger consideration of the health contingency plan within the National Multi-Risks Contingency Plan would be an improvement.

*Protection Civile* [Civil Protection] has the mandate to coordinate emergency services such as fire fighters, police and the army in times of emergency, but lacks the capacity and support to fulfil that role. The department lacks good communication equipment, has no direct access to pre-positioned food and non-food items, and has limited capacity to provide appropriate training.

## Conclusion

The importance placed on disaster response and preparedness in Niger is reflected in the large number of strategies that incorporate disaster risk management, the creation of the *Dispositif* and related mechanisms, and the recent elaboration of contingency plans (related to health and multiple risks). Elements of emergency preparedness, such as early warning, coordination and capacity building, are woven into different strategies. Most preparedness activities at the national level are focused on improving food insecurity early warning systems and analysis, strengthening food reserves, enhancing coordination and fostering resilience to shocks. While progress has been made in incorporating risks and shocks related to food insecurity into national strategies and initiatives, this is not the case for other risks such as floods, epidemics or population movements. Furthermore, the repetition of objectives throughout the strategies (i.e. improving emergency responses, coordination and early warning) suggests that there have been challenges in finding appropriate, effective and durable solutions to address these issues.

## International system and emergency preparedness: architecture, actors and activities

### International architecture and policies

Since the major food crisis in the mid-1980s, there has been a growing community of international aid organisations in Niger. The number of international aid agencies increased dramatically following the food crisis of 2005. OCHA records the presence of 14 UN

agencies, 101 international NGOs, six regional institutions, eight Red Cross societies, 16 donor agencies and two development banks (OCHA, n.d.a). This section explores how international aid agencies and donors are approaching emergency preparedness, including the strategies that guide their humanitarian and development actions. Analysis of the financing of strategies and other emergency preparedness funding streams is provided in Section IV.

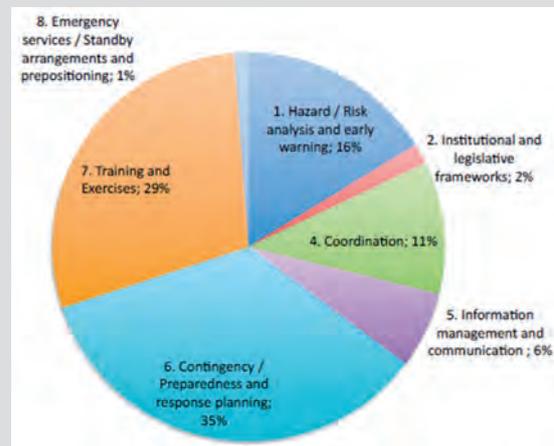
### DRM and emergency preparedness in the international humanitarian and development strategies

International actors have progressively become more engaged in DRM and preparedness in Niger. Development and humanitarian strategies that guide the international engagement in Niger are replete with references to risk and feature some preparedness components.

Most humanitarian funds in Niger are generated through CAP. Comprising a common humanitarian action plan and projects, the CAP serves as a frame of reference and detailed work plan for international humanitarian assistance in the country (OCHA, n.d.b). In 2013, the CAP did not focus squarely on emergency response – largely due to a good harvest in 2012 – but rather outlines the need to prioritize more permanent solutions to build longer-term resilience. The 2013 CAP global objective is to enhance vulnerable communities' resilience to crises and disasters by improving emergency preparedness and management and supporting early recovery (OCHA, 2012). It is therefore logical that numerous projects proposed in the appeal include strong emergency preparedness components. Although only one project includes the term 'preparedness' in its title, approximately 63% of the projects incorporate at least one emergency preparedness component. Contingency and response planning represent 35% of the emergency-preparedness activities, followed by training exercises (29%), hazard and risk analysis and early warning systems (16%), and coordination (11%) (see Figure 3).

The United National Development Assistance Framework (UNDAF) 2009–2013 is the main document guiding the development assistance of the UN Country Team in Niger. About 34% of the US\$1 billion funds requested is targeted towards environment, sustainable development and food security, which include the strongest emergency preparedness components. One of the four cross-cutting issues of UNDAF is crisis and disaster prevention and management. The document includes outcomes and activities relevant to emergency preparedness, including improving the *Dispositif*, increasing access to environmental and early warning information, and improving conflict preparedness, prevention and management.

**Figure 3. 2013 CAP preparedness activities by category**



A report on UNDAF progress in 2012 found that, while food security remains a main cause of vulnerability, progress had been made in preparedness, especially related to the early warning and surveillance system. However, the evaluation found a lack of coordination and clear responsibilities amongst the different actors involved in UNDAF activities. The 2014–2017 UNDAF, which had not been disseminated at the time of writing, features preparedness components related to building the capacity of the Dispositif, the articulation of a national strategy based on the Hyogo Framework for Action and the development of local contingency plans. According to Le Rapport Annuel du Coordonnateur Résident 2012, preparedness for crises is one of the UN Country Team's 11 priorities for 2013 (UNDP, 2013).

The World Bank Country Assistance Strategy (CAS) lays out the World Bank's development priorities. The strategy seeks to promote long-term investments and structural adjustments to foster economic growth and social development in Niger, and acknowledges that this cannot be achieved without improving disaster and crisis prevention and management. The CAS 2013–2016 outlines three strategic objectives: the promotion of resilient growth; the reduction of vulnerability; and the strengthening of governance and capacity for public service delivery. The first two strategic objectives include some emergency preparedness components, though more emphasis is placed on long-term social and economic policies. Activities related to emergency preparedness include strengthening early detection of desert locusts, supporting the 3N strategy and the Dispositif, as well as increasing community-level preparedness through enhancing food and fodder banks and supporting adaptive strategies.

The African Development Bank (AfDB) Country Strategic Paper for 2005–2012 recognises that Niger is greatly challenged by external shocks that trigger natural disasters, such as drought and floods. While the strategy for Niger does not reference emergency preparedness, the AfDB is supporting several initiatives that include emergency components in Niger through its regional work (see Section IV). The Economic Community of West African States (ECOWAS) Policy for Disaster Risk Reduction includes two priorities directly related to emergency preparedness: reducing disasters by improving identification, assessment, monitoring and early warning of risks; and improving the effectiveness of response through stronger disaster preparedness (ECOWAS, 2006).

### International preparedness actors, activities and initiatives

Regional actors, UN agencies, donors, multilateral development banks and international NGOs are undertaking and supporting a wide variety of emergency preparedness activities in Niger. Broadly speaking, international NGOs often direct their efforts to supporting preparedness at the community level, while UN agencies and donors tend to focus on enhancing government capacities at the national level through early warning, risk and need assessment, pre-positioning, contingency planning and coordination. Actors and actions are summarised in Table 2.

### Regional initiatives and multilateral development banks

The *Comité Permanent Inter-État de Lutte contre la Sécheresse dans le Sahel* (CILSS) is coordinating a regional strategy to respond to desertification in the Sahel. It created the Agrhymet regional centre, which is a specialised institution that offers hydrological and agro-ecological information. The National Market Information System (SIMA) works in close collaboration with the other market information systems in West Africa through the *Réseau des systèmes d'information de marché en Afrique de l'Ouest* (AFD, 2012).

The Food Crisis Prevention Network (RPCA) was created in 1985 by donors to foster high quality information and early warning in the region. In April 2013, RPCA Members approved the Regional Roadmap of the Global Alliance for Resilience (AGIR). This alliance involves the 17 member countries of ECOWAS, UEMOA and CILSS and aims to build resilience to food crises across the region. This initiative seeks to increase preparedness by 'strengthening early warning systems, applying the Charter for Food Crisis Prevention and Management, creating a Regional Food Reserve and enhancing governance in the areas of conflict prevention and management.' (AFD, 2012). USAID established an early warning system network, FEWSNET, following food crises in East and West Africa in 1985.

**Table 2. Actors and actions in support of preparedness in Niger**

Organisation or initiative	Support to preparedness (examples)
<b>Initiatives and networks</b>	
<i>Comité Permanent Inter-État de Lutte contre la Sécheresse dans le Sahel (CILSS)</i>	Coordinating a regional strategy to respond to desertification in the Sahel
Food Crisis Prevention Network	Regional early warning
FEWSNET	Provider of analysis on early warning and acute food insecurity Publication of food security updates, outlooks and specialised reports and support to contingency and response planning
<b>Multilateral Investment Banks</b>	
AfDB	Support to the Climate for Development in Africa Programme (to support responses to climate change) Creation of the ClimDev-Africa Special Fund
World Bank	Planning to create a climatic information platform for agricultural producers and local development plans incorporating climate resilience Considering a project that would support early warning
<b>United Nations</b>	
OCHA	Facilitating workshops, developing multi-risk contingency plans, organising simulation exercises, producing and disseminating information and early warning products, hazard risk analysis, information management, coordination and response planning.
UNDP	Support to the Dispositif (e.g. risk analysis, early warning, CCAGC databases, multi-risk contingency plans, regional committees for disaster management and communication capacities) Support to developing national preparedness institutional and legislative frameworks
WHO	Strengthening surveillance of diseases through epidemiologic data collection and analysis and the creation of a network of laboratories Support the Ministry of Health's preparedness and contingency planning efforts
UNICEF	Participated in the development in 2012 of the Mali+3 contingency plan; contingency stocks
FAO	Co-leads the food-security cluster and collaborates with the SAP, including on early warning Supports preparedness of pastoralists and agro-pastoralists Developed a Crisis and Disaster Management Action Plan for 2012–2014
WFP	Co-leads the food-security cluster and collaborates with the SAP, including on early warning
UNHCR	Contingency planning to prepare for Mali refugee flows
<b>Red Cross and Red Crescent</b>	
ICRC	Pre-positioning of stocks
Nigerien Red Cross	Simulation exercises with firemen and medical staff
Multiple	Contingency planning to support the capacity of Nigerien volunteers
<b>NGO</b>	
CARE, CRS, Mercy Corps, Oxfam, Save the Children and World Vision	Emergency Capacity Building Project to improve the preparedness and response of the humanitarian community in emergency situations
MSF	Preparedness for cholera and epidemics
Other NGOs (e.g. Action Against Hunger, ACTED, Concern)	Support for other preparedness measures, such as community-level preparedness

Niger is one of the 35 countries covered by FEWSNET, which provides analysis on livelihoods, markets and food insecurity (<http://www.fews.net>).

Developed and supported by the AfDB, the African Union and the UN Economic Commission for Africa (UNECA), the Climate for Development in Africa Programme (ClimDev-Africa) aims to create a solid foundation in Africa for the response to climate change by building science and observational infrastructure, enabling strong working partnerships amongst government institutions, private sector, civil society and vulnerable communities and strengthening knowledge frameworks (AUC/UNECA/AfDB, 2012). The AfDB developed the ClimDev-Africa Special Fund to support activities related to the generation and dissemination of reliable climate information, the integration of climate change information into development programmes and the implementation of pilot adaptation practices (AfDB, n.d.). However, the Web site associated with the fund indicates that it is not yet active owing to the need to secure financing (AfDB, n.d.).

With the goal of improving resilience to natural hazards and climate change, the World Bank is planning to create a climatic information platform in Niger for agricultural producers and local development plans incorporating climate resilience features. A project on land, urban and disaster management, with a focus on multi-hazard early warning systems, will be considered by the World Bank in 2014.

### UN agencies

All of the major UN agencies are present in Niger and many are involved in preparedness. OCHA reports that it takes a lead role for emergency preparedness and has a team in Niamey and a sub-office in each region. OCHA's engagement in preparedness includes hazard risk analysis and early warning, information management and communication, as well as coordination and response planning. OCHA releases weekly humanitarian information bulletins, and supports inter-agency information management efforts. It supports local preparedness by facilitating workshops, supporting contingency planning, and organising simulation exercises, as well as producing and disseminating information and early warning products.

UNDP plays an important role in disaster preparedness, primarily through support to developing national preparedness institutional and legislative frameworks. Its Energy and Environment Unit has supported Niger in the development of climate change adaptation strategies and communications. The Bureau for Crisis Prevention and Recovery (BCPR) funds staff who focus on disaster preparedness and crisis prevention and recovery. They support the Dispositif and follow up on international agreements, such as the Hyogo Framework.

In 2012–2013, one of the three BCPR projects included strong emergency preparedness components. *Le programme de Renforcement des Capacités du Niger pour la Prévention et la Gestion des Crises et Catastrophes* [Niger Capacity Building for Crises and Disasters Prevention and Management Programme] seeks to strengthen the Dispositif's risk analysis and early warning, the CCAGC databases, the national and regional multi-risk contingency plans, the regional committees for disaster management, as well as the journalists' crises information and communication capacities.

WHO works in collaboration with the Ministry of Health to improve disease control and management of emergencies by focusing on risk identification, needs assessment, capacity-building and communication. Its activities have included strengthening surveillance of diseases through epidemiologic data collection and analysis, and the creation a network of laboratories, as well as supporting the Ministry of Health's preparedness and contingency planning efforts (WHO, 2006b).

WFP and FAO co-lead the food security cluster and work in close collaboration with the SAP and its partners to ensure the accuracy of the early warning system. Their activities include vulnerability and household economic services and monitoring of food prices. FAO also implements community preparedness activities to strengthen the preparedness capacity of pastoralists and agro-pastoralists. It developed a Crisis and Disaster Management Action Plan for 2012–2014. The plan seeks to reduce vulnerability through better crisis preparedness, prevention and management, as well as supporting national authorities to better prepare for and respond more efficiently to crises. One outcome focuses on improving crisis response plans, implementing community systems for risk analysis and management and enhancing cereal and livestock food banks. It also seeks to improve assistance to vulnerable communities after a shock by strengthening resilience and food access and preventing asset losses (FAO, 2012).

UNICEF supports a wide range of activities in the development and humanitarian sectors, which results in an important role in emergency preparedness. As part of its sub-regional preparedness efforts, UNICEF participated in the development in 2012 of the Mali+3 contingency plan and replenished its contingency stock for 100,000 persons (at an approximate cost of US\$1.5 million), in order to respond to potential population movements resulting from the situation in Mali. UNHCR also set up a contingency plan in January 2013 to prepare for refugee flows, evaluating the value of the potential needs at US\$20 million (UNHCR, 2013). It houses an estimated 15,000 NFI kits and Water and Sanitation (WATSAN) equipment that can be used during crises.

### Red Cross

The International Federation of Red Cross and Red Crescent Societies (IFRC) stresses that 'National Societies in cooperation with the IFRC should prioritise disaster preparedness and integrate it into their overall programming efforts (IFRC, n.d.). At the time of writing, a joint four-year contingency plan was being developed to support the capacity of the Nigerien volunteers who are present in all regions of the country. The International Committee of the Red Cross (ICRC) keeps an estimated 15,000 NFI kits and as well as WATSAN equipment is available in case of disaster. The Nigerien Red Cross has performed life-saving and first aid simulation exercises with firemen and medical staff. This structure could play a more important role in the preparation and response at the national and regional levels, but its capacity is lacking.

### NGOs

Many international NGOs support community-level preparedness, including activities to enhance coordination, information sharing, emergency planning and training at the local level.

The Emergency Capacity Building (ECB) was developed in 2006 by six international NGOs (CARE, Catholic Relief Services, Mercy Corps, Oxfam, Save the Children and World Vision) to improve the preparedness and response of the humanitarian community in emergency situations. Niger was selected as one of the five focus countries of the project in its second implementation phase (2009–2013). Many activities, and in particular training, have been implemented to improve the preparedness of humanitarian actors. These include a participatory capacity and vulnerability analysis training workshop conducted in 2009, a flood simulation to identify gaps in coordination and training on needs assessment in 2011, and building national staff capacity in emergency preparedness and management. A Participatory Disaster Risk Assessment and Planning Programme was set up to help community

members identify their needs, recognise the risks they face and develop plans, measures and activities to prepare for those risks (ECB, n.d.).

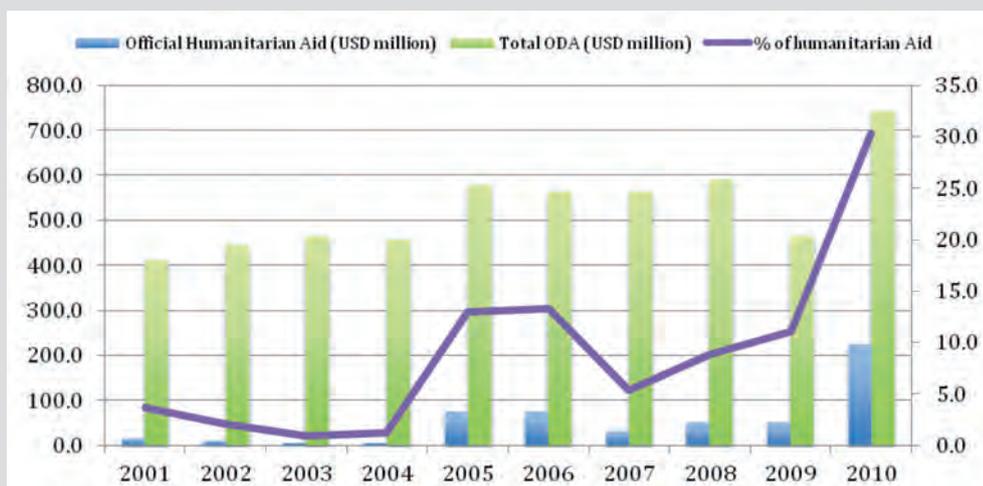
Three of the operational sections of *Médecins Sans Frontières* (MSF) are present in Niger and are core players in promoting preparedness for cholera and other potential epidemics.

### Conclusion

A wide range of preparedness activities is supported by different international actors present in Niger. These span most aspects of preparedness, including hazard and risk analysis, early warning, institutional and legislative frameworks, coordination, information and communication management, contingency preparedness and response planning, pre-positioning and training and exercises. These activities are scattered across sectors and regions and subsumed with the wider development or humanitarian agenda of each agency. Preparedness activities are often implemented as part of broader projects, with very few projects dedicated solely to emergency preparedness. On the one hand, this could be interpreted as putting a low priority on preparedness and not dealing with it in a coherent, complete and consistent way. On the other hand, it could suggest that preparedness cannot be divorced from wider humanitarian and development efforts, and that doing so might create yet another 'silo' of assistance activities. Because the approach of international actors is fragmented, it is difficult to identify a clear division of labour for emergency preparedness and create accountability for gaps.

UN agencies and donors are supporting preparedness activities focused mainly on building capacity at the national level, especially through considerable support to the Dispositif. With the strong focus of the Dispositif on food crises, support for preparedness in the other sectors

Figure 4. International assistance to Niger 2001–2010



remains low. While this is logical given the devastating impact of droughts and food crises, more attention is needed to prepare for other hazards such as floods, epidemics and conflict.

While NGOs are engaging to a certain extent in community preparedness activities, community preparedness and capacity-building at the regional and sub-regional levels emerge as important gaps in the international community's approach to preparedness in Niger.

## Financing emergency preparedness

### General aid profile for Niger

Niger received US\$5.28 billion in Official Development Assistance (ODA) over the last decade (2001–2010). ODA to Niger increased from US\$410 million in 2001 to US\$743 million in 2010. While the volume and percentage of humanitarian aid to Niger was very low in the first half of the decade (3.7% of ODA in 2001 and 0.9% in 2003), it spiked in years with increased volumes of humanitarian aid owing to food crises (e.g. 2005–2006, 2010); Niger was the eleventh-largest recipient of official humanitarian aid in 2010. Since then, humanitarian aid has represented a considerable part of the total ODA received by Niger, a trend driven by recurrent crises requiring humanitarian interventions.

According to OECD data, the largest donors of ODA in Niger in 2009–2010 were the EU institutions, followed by the USA, France, the World Bank, Canada, Belgium and Japan. During this same period, the major donors of humanitarian aid were the USA followed by the EU, Spain, Sweden, UK and Germany (see Table 3). With the exception of the EU and USA, which are both main donors of ODA and humanitarian aid in Niger, donors of ODA are not necessarily also the main humanitarian aid donors.

## Emergency preparedness funding in Niger

### International donors

The European Community's Humanitarian Office Disaster Preparedness Programme (DIPECHO) has not been developed in the Sahel Region. However, the EU is the most significant financial backer of the Dispositif (see below). The EU is also supporting rural information systems and implementation of the National Rural Development Strategy, which includes emergency preparedness and DRM components. The EU has committed to provide financial assistance to strengthen reserves and stocks available in time of crisis.

USAID has a long history in supporting preparedness in Niger. In the early 1990s, USAID funded a Disaster Preparedness and Mitigation Program (DPM) to improve the disaster response and early warning capabilities of the government. Along with FEWSNET, USAID provides financial support to various NGOs to implement projects (including through Food for Peace), some of which include emergency-preparedness components. However, given that emergency preparedness components are integrated within broader activities and objectives, it is not possible to estimate the financial value of these contributions.

In 2013, the French Development Agency (AFD) a financed a US\$2 million project dedicated to the creation of a climate change surveillance system in Niger. It also provided US\$47 million to the Nigerien government, some of which is supporting the implementation of the 3N initiative and the Economic and Social Development Programme 2012–2015. However, it is impossible to know exactly how much this €35 million budget support (if any) is directed towards emergency preparedness (AFD, 2014). Out of the 14 AFD projects in Niger, only the climate change surveillance system has strong links to preparedness (AFD, 2013).

**Table 3. Major donors of humanitarian aid and ODA to Niger in 2009 (US\$ million)**

Donors of total gross ODA	EU Institutions	USA	France	World Bank	Canada	Belgium	Japan
Volumes (2009–2010 average)	108	70	62	55	32	31	30
Donors of Humanitarian Aid	USA	EU	Spain	Sweden	UK	Germany	
Volumes (2009–2010 average)	36.3	25	14.3	12.2	10.2	9.6	

The ECB Project Phase II (2009–2013) has been funded through a US\$5 million grant from the Bill & Melinda Gates Foundation, and more than US\$1 million for specific programmatic activities has provided by ECHO and by DFID. Additional funding has been provided by OFDA (USAID) and several private donors.

### Financial support to the national Dispositif and support plan

National budgets primarily support emergency preparedness through financial support to the Dispositif, including the early warning system and the National Market Information System (SIMA). Between June 2012 and November 2013, the Dispositif's planned expenditures were estimated at US\$4.2 million, of which the national government would provide 32.6%, the EU 46.5%, and other partners 20.9% (see Table 4).

In 2012–2013, the EU was by far the main contributor to the Dispositif, providing US\$1.96 million. Approximately 38% of EU funding directly supports the Dispositif's activities, such as the functioning of its main agencies, coordination, advocacy, communication and visibility, studies, consultations and workshops, vulnerability assessments, regional and sub-regional committees, and monitoring and evaluation. Approximately 18% of EU funding goes to investments, such as purchases of offices, cars and equipment, and 43% is devoted to the Dispositif's operating costs, such as staff expenditures (see Annex 1). Beyond the support from the EU, the Dispositif receives technical assistance from France and Germany for support to the executive body (CCAGC); Switzerland assists with the improvement of the accounting tools; Canada focuses on the follow-up evaluation system and Germany helps with the inventory management. Spain and Luxembourg provide general support.

The budget of the national early warning system (SAP) is US\$416,000, funded in part by the EU (47%), the Niger government (32%) and other donors (21%). Other resources come from finances of national government ministries or organisations, but it is difficult to isolate these figures as they are embedded within core funding. SIMA

has a budget of approximately US\$120,000 from the EU, combined with another US\$40,000 from other donors and NGOs.

The 2013 support plan elaborated by the Dispositif and the Office of the Prime Minister in February had an estimated total budget of US\$269.9 million (see Annex 2). The budget covers emergency responses (i.e. food and cash-for-work programmes, food distribution and cash transfers, blanket feeding) and emergency preparedness activities, such as strengthening cereal banks, enhancing crisis prevention and management tools (mainly stocks and reserves), improving early warning systems and promoting national coordination in crisis prevention and management. The budget for preparedness activities is estimated at US\$100.8 million. However, the means through the support plan would be financed was not stated in the document released by the government.

### CAP

As indicated in the previous section, most humanitarian financing in Niger is associated with the CAP. In 2013, the UN appealed for over US\$354 million to implement 83 projects, a rise from US\$229 in 2012 and US\$187 million in 2011. The 2013 appeal was 81% funded, making it the second highest funded appeal of that year. As stated in the previous section, 63% of the projects have at least one emergency preparedness component. Based on project descriptions, this study estimates that US\$48.2 million was requested for emergency preparedness through the CAP for 2013 – not an insubstantial amount (see Table 5). Most of these projects are in the nutrition, food security and health sectors.

The analysis was done using the list of the 2013 CAP projects and their descriptions that can be found on the Financial Tracking System Web site. Each project was coded to see if it included at least one emergency preparedness activity. The estimated value of emergency preparedness requested has been calculated by adding the requested funds of each CAP project including at least one emergency preparedness activity. The total emergency preparedness value funded has been found by looking at the funding actually received for each CAP project that included at least one emergency preparedness activity (the funds received by CAP projects are on the Financial Tracking System Web site).

As of May 2013, four donors had funded preparedness through CAP. Two projects were funded in the nutrition sector, one by the UK (US\$3.54 million) and the other by ECHO (US\$1.11 million). In the health sector, five projects had been funded: four by Japan (totalling US\$3.73 million), with ECHO funding the remaining project (US\$0.28 million). France had financed a food security initiative (US\$0.07 million) and Canada supported a WASH project (US\$0.20 million) (see Annex 3). Initial

**Table 4. Dispositif organisational budget June 2012–November 2013**

	Total	Government	EU	Other Partners
US\$	4,213,449	1,373,981	1,957,299	880,370
%	100%	32.6%	46.5%	20.9%

Sources: DNPGCCA and Fonds Européen de Développement, Programme d'appui au secteur sécurité alimentaire au Niger, Devis-Programme no.3

**Table 5. 2013 CAP projects that included at least one emergency preparedness component**

Sector	Number of projects	Projects including at least one EP component	Total estimated value of EP requested (US\$ million)
WASH	18	14	3.89
Education	4	3	0.19
Logistics	1	0	0
Multi-Sector	4	1	0.08
Nutrition	13	11	17.17
Protection	6	1	0.17
Early Recovery	7	4	2.58
Health	10	9	9.78
Food Security	17	8	10.7
Coordination	2	2	3.68
Other	1	0	0
<b>Total</b>	<b>83</b>	<b>53</b>	<b>48.23</b>

analysis suggested that the funding of emergency preparedness through the CAP was valued at approximately US\$14 million for 2013, but the actual figure might in fact be higher given that the CAP ended up being well-funded.

### Humanitarian pooled funds

Humanitarian Pooled Funds have not contributed significantly to emergency preparedness funding in Niger. There is no Emergency Response Fund (ERF) or Common Humanitarian Fund (CHF) activity in the country, so the analysis here concerns CERF. The Central Emergency Response Fund (CERF) has been a substantial source of humanitarian funding for UN agencies in the country (in 2012, it channelled US\$24.6 million of humanitarian aid). The CERF is a humanitarian fund established by the United Nations General Assembly to enable more timely and reliable humanitarian assistance, with objectives to promote rapid responses and respond to under-funded crises. It does not explicitly fund emergency preparedness activities, so the absence of preparedness financing through this channel is logical. However, an analysis of CERF projects in 2012 shows that some of them included preparedness components, such as a US\$2 million UNHCR programme, which included building the capacity of local authorities to respond to the needs of refugees. The CERF provided US\$1 million to WHO and UNICEF to support government efforts to prevent and treat cholera victims by, *inter alia*, strengthening disease surveillance throughout the country. Emergency preparedness components therefore exist, but are rare in the CERF-funded projects.

### Climate adaption mechanisms

Niger received US\$110 million (US\$50 million as a grant and US\$60 million as a concessional loan) through the

Pilot Program for Climate Resilience (PPCR) (PPCR, 2012). Giving priority to least developed countries, the PPCR is a targeted programme of the Strategic Climate Fund (SCF), one of the two Climate Investment Funds channelled through the multilateral development banks. The main goal of the PPCR is to strengthen resilience to climate change (PPCR, 2014). In Niger, PPCR financing will support sustainable land management, forecasting and weather data-analysis, social protection and pilot initiatives aimed at insuring crops against risks from climate variability and change. Two projects with preparedness components financed by PPCR are a US\$64.5 million Community Action Project for Climate Resilience (CAPCR) (implemented by IBRD and IFC) and a US\$13.5 million Project for the Improvement of Climate Forecasting Systems and Operationalisation of Early Warning Systems (implemented by the AfDB) (Climate Funds Update, n.d.). The emergency preparedness focus is strongest in the latter project, which aims to 'improve the national climate observatory system, optimize climate modelling, strengthen the national early warning system, and expand communication on climate information' (AfDB, 2012).

Managed by the Global Environment Facility, the Least Developed Country Fund (LDCF) delivers funding to support the preparation and implementation of the NAPA. The NAPA presents priority projects aimed at building resilience to climate change, and therefore, are likely to include some emergency-preparedness components. However, it is very challenging to quantify the financial value of such elements. Since 2005, the LDCF has channelled US\$50.7 million to support the implementation of four projects aiming to build adaptation to climate change (<http://www.thegef.org/>). Three of these four

projects, all implemented by UNDP, probably include emergency-preparedness activities. The one with the strongest link to preparedness is a US\$3.75 million project on scaling up community-based adaptation.

### Emergency preparedness activities embedded in other programmes and core funding

Emergency preparedness, even if not articulated clearly, appears to be a priority for many international agencies. Interviews suggest that most agencies do not separate preparedness activities from mainstream humanitarian interventions; they are considered part and parcel of their existing work. Many international NGOs stated that elements of 'core funding' go towards emergency preparedness in the form of coordination, information management, emergency planning and local training. Donor agencies, too, estimate that part of their core funding is going to national strategies and plans that include some emergency preparedness components.

UN agencies also report that core funds are often focused on elements of preparedness, including cluster coordination, contingency planning and government capacity-building. UNDP BCPR's US\$2.1 million project, 'Niger Capacity Building for Crises and Disasters Prevention and Management Programme' is supported by US\$600,000 from the Thematic Trust Fund for Crisis Prevention and Recovery (CPRTTF) and the rest from UNDP core resources for Crisis Prevention and Recovery Activities (TRAC 1.1.3) (UNDP, 2012). The FAO Crisis and Disaster Management Action Plan for 2012–2014 has a total provisional budget of US\$150 million and includes two outcomes with very strong preparedness components (with estimated budgets totalling US\$125 million).

Development actors have tended to advocate supporting resilience, rather than emergency preparedness, in order to address underlying risk factors contributing to long-term vulnerability. Many interviewees said that they did not see the value of showcasing preparedness by separating it from other types of programming. At the same time, it was felt that both more structured planning and a clearer presentation of preparedness needs and actions would increase visibility of preparedness activities, presenting a stronger case to donors and acting as a reference for both needs and gaps.

### DRR and risk-focused mechanisms

Niger has not been identified as a priority country by the Global Facility for Disaster Reduction and Recovery (GFDRR) and thus has received no funding to date.

### Cost–benefit analysis

A cost–benefit and cost-effectiveness analysis for emergency preparedness in Niger provides indicative evidence that there is a financial imperative for greater

investment in effective preparedness (Cabot Venton, Richards and Peters, forthcoming). The cost of emergency preparedness is described in both the government's Support Plan and the flood risk management plan, with a total estimated cost of US\$47.9 million per year. The costs and benefits were inputted into a 20-year model, in order to estimate the costs of emergency preparedness compared with its benefits, monetised in terms of avoided costs of aid and disaster losses. Because of the number of assumptions required in the modelling, three scenarios were used, varying the assumptions around the absolute level of disaster losses, the potential reduction in disaster losses and the discount rate. The modelling found the costs and benefits are positive across all three scenarios. In the most conservative scenario, it is estimated that US\$3.25 of benefit is generated for every US\$1 spent. This increases to as high as US\$5.31 of benefit for every US\$1 spent in the least conservative scenario. Cost–benefit analysis found that the monetary benefits of investing in preparedness in relation to drought – assuming that it is implemented in a matter that delivers the expected gains – clearly outweighs the costs.

## Conclusions

Several sources of funding are available in Niger to finance emergency preparedness (see Annex 6 for summary of funding sources cited in this section). The National Dispositif and its Support Plan are the most significant focus of emergency preparedness funding, with financing by the national government and a range of donors, particularly the EU. Most of the international humanitarian funds for emergency preparedness are channelled through CAP; its strong focus on preparedness suggests that it is an important avenue for financing these activities, even if tracking specific funding amounts is challenging. Climate Change Funds and core budgets are also considerable sources of financing, though again it is almost impossible to quantify the exact funding amounts, as preparedness activities are embedded in wider projects. The CERF, DRR funds and private sector funding do not contribute significantly towards emergency preparedness financing in Niger. Cost–benefit modelling clearly supports further investment in emergency preparedness, as the benefits in terms of reduced caseload and losses far outweigh the costs.

## Conclusions and recommendations

### The state of emergency preparedness in Niger

The government of Niger has gradually developed a comprehensive national institutional framework for crises prevention and management. The Dispositif is the main focal point for DRM and emergency preparedness and is the primary vehicle for collaboration among the national

government, international organisations and donors. The structure has been particularly effective in the case of food crises. While inclusive, the Dispositif is considered by many as complex, bureaucratic and lacking national ownership.

There is considerable ongoing work on emergency preparedness in Niger, largely in the food-security sector. For the other types of risks, such as floods, epidemics and population migrations, some progress has been made, especially with the recent elaboration of the National Multi-Risk Contingency Plan and the Health Contingency Plan. However, these plans are not fully operational, and preparedness for disasters beyond droughts and food insecurity remains inadequate.

Preparedness activities are supported by a range of international actors, including bilateral donors, multilateral development banks, UN agencies, NGOs and the Red Cross. Their efforts span hazard and risk analysis and early warning, institutional and legislative frameworks, coordination, information and communication management, contingency and response planning, pre-positioning and training. However, gaps exist. Given its risk profile, the need to support preparedness in Niger is arguably very high, and more support is needed for community-level disaster preparedness and addressing a wider range of risks. Efforts to support preparedness are highly fragmented, with activities scattered across sectors and regions, and subsumed in the wider development or humanitarian agenda of each agency. While this could encourage the integration of risk and preparedness within broader programmes, it makes gaps and duplications hard to identify and avoid.

### Emergency preparedness financing

A considerable part of the national budget and international aid supporting preparedness uses the National Dispositif and its Support Plan. While this financial support appears to have strongly enhanced preparedness in the food-security sector, it had not strengthened preparedness in other sectors to the same degree, and the Dispositif is not fully operational for dealing with other types of disasters. More support is also needed for the Ministry of Health and Civil Protection department to ensure that they are able to effectively lend support in response to crises. Donors therefore should continue to support the National Dispositif and the Support Plan, while also supporting other government entities involved in preparing for and managing various types of disasters. Development actors are increasingly advocating for supporting resilience, rather than emergency preparedness, in order to address underlying risk factors contributing to long-term vulnerability. The attention to resilience could offer entry-points for support to emergency preparedness, such as through local-level capacity building.

A considerable portion of international humanitarian funding for preparedness is channelled through the CAP. Disaster risk reduction (including emergency preparedness) have become high priorities within the CAP. However, increasing funding for emergency preparedness through humanitarian financing channels would require a shift in the cultures of donors, governments and aid agencies from response to prevention and preparedness. Funding mechanisms geared towards life-saving responses, such as the CERF, are not likely to become significant channels for emergency preparedness funding as that is not their purpose.

Support for disaster preparedness at the community level is an important gap. Institutional capacity and resources at the national level are limited compared with needs and opportunities, but diminish even further at sub-national and local levels, with little emergency preparedness funding from the capital reaching local governments and communities. While several NGOs are engaged in community preparedness, limited funding for emergency preparedness means that they often rely on core funding and contingency lines within budgets and programmes.

Preparedness funding is largely split around the humanitarian-development divide, which poses a challenge as emergency preparedness requires a mix of short-, medium- and long-term actions. In an ideal world, efforts to bridge the gaps between the humanitarian and development agendas would solve this problem. In reality, the humanitarian vs. development division remains 'the thorniest dichotomy in aid', with approaches like developmental relief, linking relief and development, early recovery and resilience making only small progress in bridging the gap. Thus efforts to promote synergies between humanitarian and development approaches should be supported and might yield benefits for emergency preparedness, but it is also important to recognise and work within the divides that exist in order to support preparedness.

Funding of emergency preparedness Niger is complex, owing to the many channels, donors and mechanisms through which activities supporting preparedness are financed. None of these devote a percentage of their funds to preparedness activities nor advocate for doing so. Preparedness lacks visibility, and their funding via wider development and humanitarian initiatives makes it difficult to track preparedness financing. The development of an emergency preparedness-tracking tool could help clarify the picture by identifying needs and gaps in preparedness funding.

The development of a clear plan of action for emergency preparedness is required to clarify the needs and financing requirements, as well as to delineate the roles and responsibilities of actors in this sector. The favourable cost-benefit analysis of investing in preparedness

clearly suggests a fiduciary duty on the part of donors and the Niger government to focus more on emergency preparedness. While more funding in scale and scope is needed to improve the state of emergency preparedness in the country, other changes are also required, including ensuring the effectiveness of preparedness activities, increasing coherence and coordination, and prioritising preparedness.

## Recommendations

### Focusing on the gaps

To fill the existing gaps in the preparedness sector, national and international actors should:

- Focus on building the long-term capacity of the government to respond efficiently to all risks by:
  - Comprehensively expanding the preparedness considerations included in the different national policies, strategies and plans beyond food-insecurity.
  - Supporting initiatives and structural changes to ensure organisational coherence, cohesion, transparency and efficiency of the Dispositif, including the institutional inclusion of the body managing other risks (i.e. floods, epidemics and population migration) within the Dispositif.
  - Channelling additional funds to actors involved in specific preparedness activities for other types of disasters, such as the Ministry of Health and Civil Protection.
  - Participating in the revision, implementation and financing of the national multi-risk contingency plan and the health contingency plan.
- Improve preparedness at the local level by:
  - Undertaking an assessment of sub-national and local disaster preparedness needs.
  - Increasing human and logistics capacities of local authorities through capacity-building initiatives and the development of regional and local contingency plans.
  - Increasing financial support to local authorities and devoting more funds to preparedness initiatives focused on the local and community level.
  - Encouraging the participation of local authorities and communities at all stages of the Dispositif system.
  - Improving community-level early warning information and systems.

### Improving coordination and coherence

Improving the coherence and coordination of preparedness activities would reduce duplication and gaps, as well as foster a more effective and comprehensive approach to preparedness. The government, donors and national and international aid agencies should pursue this by:

- Prioritising preparedness in strategies, plans of action and projects.
- Clearly identifying and distinguishing specific preparedness activities included in broader development and humanitarian projects.
- Creating a preparedness tracking tool to better identify and analyse the needs and gaps in preparedness activities and funding.
- Elaborating a common specific action plan for preparedness involving all stakeholders, which will clarify needs and funding requirements, identify actors present in the preparedness sector and articulate their roles and responsibilities.

### Encouraging donor investments in preparedness

Transformational changes would be key to increasing funding opportunities for emergency preparedness.

These changes include shifting the cultures of donors and aid agencies from 'response' to 'prevention and preparedness', and bridging gaps between humanitarian and development agendas where possible. These changes could be encouraged by:

- Increasing the visibility of preparedness actions through developing and publicising a country risk assessment and a preparedness need assessment.
- Understanding the importance of preparedness activities as part of efforts to enhance long-term resilience.
- Highlighting the benefits of *ex ante* expenditure and building the business case for investing in preparedness.
- Seeking funding opportunities beyond the main OECD DAC donors present in Niger and pursuing opportunities for financing through funding mechanisms focused on climate change and DRR.
- Increasing advocacy for improving emergency-preparedness financing in Niger and globally.

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## Annex 1. Dispositif organisationnel budget financé by the EU June 2012–November 2013

N°	Libellés	Budget DP3	
<b>1</b>	<b>Activités</b>	<b>367 340 000</b>	<b>38%</b>
1.1	Fonctionnement DNPGCC: CNPGCC/CMC/CRC/ONG/	4 340 000	
1.2	Rencontres techniques annuelles	66 000 000	
1.3	Pilotage & coordination des interventions	7 000 000	
1.4	Etudes, consultations, ateliers	-	
1.5	Plaidoyer, Communication, visibilité du DNPGCC	15 000 000	
1.6	Identification vulnérabilité	135 000 000	
1.7	Renforcement comités sous régionaux	20 000 000	
1.8	Processus de selection projet atténuation des crises (GTI, missions, ...)	10 000 000	
1.9	Suivi evaluation incluant contrôle OPVN	30 000 000	
1.10	Appui CNLA	50 000 000	
1.11	Formation/renforcement capacités	30 000 000	
<b>2</b>	<b>Investissements</b>	<b>178 001 700</b>	<b>18%</b>
2.1	Achat mobilier de bureau	19 000 000	
2.2	Achat véhicule	44 500 000	
2.3	Achat matériels informatiques / connectique	39 501 700	
2.4	Construction de bureaux / réaménagement	75 000 000	
<b>3</b>	<b>Frais de fonctionnement</b>	<b>411 764 352</b>	<b>43%</b>
3.1	Frais de personnel	334 264 352	32%
3.2	Contrat assurance maladie du personnel	15 000 000	
3.3	Fourniture de bureau	5 000 000	
3.4	Consommables informatique	6 000 000	
3.5	Frais de mission intérieur & extérieur	18 000 000	
3.6	Fonctionnement véhicules	8 500 000	
3.7	Entretien batiment	2 000 000	
3.8	Frais de communication (flotte, abonnement internet...)	21 000 000	
3.9	Frais administratifs (frais bancaires, frais de publication...etc)	2 000 000	
<b>4</b>	<b>Imprévus (1%)</b>	<b>9 571 141</b>	<b>1%</b>
	<b>Total CFA</b>	<b>966 677 193</b>	<b>100%</b>
	<b>Total en Euros</b>	<b>1 473 689,88</b>	

## Annex 2. Estimated costs for Plan de soutien 2013

	U	Qté	CU	T	Acquis	GAP
Total				132 939 300 815	–	–
<b>Total OS1</b>	–			23 452 862 500	–	–
<b>R1 L'accès aux aliments des populations</b>	–			23 452 862 500	–	–
A1. Organiser des opérations Food et cash For Work	ménages	94 437	32 500	3 069 202 500		
A2. Organiser la distribution gratuite des Vivres	ménages	168 796	32 500	5 485 870 000		
A3. Organiser la vente à prix modéré de produits vivriers de base	ménages	83 000	15 000	1 245 000 000		
A4. Renforcer la disponibilité de céréales au niveau des banques céréalères	t	5 000	300000	1 500 000 000		
A5. Organiser les transferts d'argent inconditionnel (Cash Transfer)	ménages	373 932	32500	12 152 790 000		
<b>Total OS2</b>	#			47 104 753 075	–	–
<b>R2 L'incidence de la malnutrition</b>	–			15 512 075 500	–	–
A6. Assurer la supplémentation alimentaire (blanket feeding) pour les enfants de moins de deux ans.	enfants	672 932	18800	12 651 121 600		
A7. Assurer la supplémentation alimentaire (blanket feeding) pour les femmes allaitantes.	FEFA	236 932	12075	2 860 953 900		
<b>R3 La prise en charge malnutris,</b>	#VALEUR!			31 592 677 575	–	–
A8. Assurer le traitement médical	–	1 069 305	209 175	31 249 902 450	–	–
MAS sans complication	enfants	246 654	60 000	14 799 240 000		
MAS avec complication	enfants	43 527	120 000	5 223 240 000		
MAM	enfants	556 894	14 175	7 893 972 450		
FEFA	FEFA	222 230	15 000	3 333 450 000		
A9. Distribuer des rations alimentaires pour les mères accompagnantes dans les CRENI	Mères accoms	43 527	7875	342 775 125		
<b>Total OS3</b>	–			62 381 685 240	–	–
<b>R4 Les moyens d'existence d</b>	–			14 269 875 000	–	–
A10. Appuyer les éleveurs des zones pastorales ...		2 000	215000	430 000 000		
A11. Appuyer les producteurs maraichers des zones vulnérables	t	825	715000	589 875 000		

	U	Qté	CU	T	Acquis	GAP
A 12 Appuyer les producteurs de céréales et légumineuses ... vulnérables		10 000	700000	7 000 000 000		
A13. Appuyer les populations victimes d'inondation et de catastrophes naturelles	CMV	150 000	25000	3 750 000 000		
A14. Appuyer les réfugiés victimes des conflits armés ou sociaux graves	CMV	100 000	25000	2 500 000 000		
R5 Les instruments de prévention et de gestion des crises sont performants.				46 852 000 000	–	–
A15. Renforcer les capacités de constitution de réserves en vivres et non vivres aux niveaux national et local		110 000	604 200	33 252 000 000	–	–
Stock physique	t	60 000	304 200	18 252 000 000		
stock financier	t	50 000	300 000	15 000 000 000		
A16. Mettre en place un stock national de réserve d'aliments pour bétail (SNAB)	–	26 000	300 000	5 100 000 000	–	–
Stock AB	t	25 000	200 000	5 000 000 000		
BlocMultinutritionnel	t	1 000	100 000	100 000 000		
A17. Appuyer la constitution d'un stock stratégique de réserves en semences pour les interventions d'urgence	t	10 000	700000	7 000 000 000		
A18. Contribuer à la prévention des risques d'invasion acridienne	F	1	1 500 000 000	1 500 000 000		
R6 Les facteurs de risques humanitaires mieux suivis et gérés	–			1 259 810 240	–	–
A19. Renforcer les capacités de coordination nationale en matière de prévention et de gestion des crises	F	1	125 981 024	125 981 024		
A20. Renforcer le dispositif de systèmes d'information sur la situation alimentaire, nutritionnelle et de veille pastorale	F	1	377 943 072	377 943 072		
A21. Renforcer le dispositif de suivi-évaluation du dispositif est opérationnel.	F	1	755 886 144	755 886 144		

### Annex 3. CAP 2013 Analysis. List of partially or totally funded projects including at least one emergency preparedness component (all values in US\$)

Title	Donors	Channel	Funding requested total	Value of funding requested for EP	Funding received Total	Value of Funding received for EP
<b>COORDINATION</b>						
Strengthening Humanitarian Coordination and Advocacy in Niger	Allocation of unearmarked funds by OCHA	Office for the Coordination of Humanitarian Affairs	3 643 627	3 643 627	1 252 317	1 252 317
<b>WASH</b>						
AMELIORATION DE L'ACCES A L'EAU ET SON UTILISATION ADEQUATE POUR UNE MEILLEURE PREVENTION DE LA MALNUTRITION CHEZ LES FAMILLES D'ACCUEIL DES REFUGIES DANS LA COMMUNE DE BANIBANGOU	Canada	CARE International	1 620 000	324 000	995 025	197 640
<b>NUTRITION</b>						
Emergency nutrition response in Niger: save lives afflicted by severe acute malnutrition and contribute to strengthening resilience against malnutrition	United Kingdom	UNICEF	22 125 849	12 643 342	6 237 386	3 340 135,76
Support to vulnerable children in southern Niger to treat and prevent child malnutrition and mortality	European Commission Humanitarian Aid Office	SC	6 310 000	2 366 250	2 809 706	1 112 137,5
<b>HEALTH</b>						
Emergency health response for child survival in Niger: Improving the quality of management of malaria among under-five children	Japan	UNICEF	2 211 018	1 105 509	2 499 944	1 249 225,17
Riposte aux épidémies de rougeole et de poliomyélite dans les zones affectées par les urgences humanitaires	Japan	WHO	3 391 078	2 260 719	494 000	339 107,85
Réponse d'urgence aux besoins sanitaires des populations des districts sanitaires accueillant les réfugiés maliens dans les régions de Tillabéri et de Tahoua au Niger	Japan	WHO	1 331 750	665 890	1 011 400	506 076,4
Prévention et réponse sanitaire d'urgence aux épidémies et aux inondations au Niger	Japan	WHO	3 858 000	3 858 000	1 644 600	1 644 600
Amélioration de la prise en charge du paludisme chez les enfants de 0-59 mois et les femmes enceintes en y impliquant les pères dans les districts de Keita et Illéla, Région de Tahoua	European Commission Humanitarian Aid Office	MDM	451 358	128 959	451 358	128 959
<b>FOOD SECURITY</b>						
Development for pastoralists and agro-pastoralists households	France	FAO	20 550 279	2 283 364	663 130	69 500,32

## Annex 4. Share of total humanitarian aid and bilateral humanitarian aid spent on disaster prevention and preparedness

Looking a little further back, the share of total humanitarian aid spent on disaster prevention and preparedness (an admittedly wider category than emergency preparedness) increased significantly from 1.95% in 2006 to 8.8% in 2009, before decreasing to 2.81% in 2010. An analysis of the data shows that the share of bilateral humanitarian aid spent on prevention and preparedness during this whole period (2006–2010) has been substantially lower, accounting for only 0.044% on average.

Source: Global Humanitarian Assistance – A Development Initiative: <http://www.globalhumanitarianassistance.org/countryprofile/niger>

Year	International humanitarian aid (US\$ million)	Disaster prevention and preparedness (US\$ million)	Share of humanitarian aid funding preparedness (%)
2006	76.6	1.5	1.95%
2007	31.1	1.0	3.21%
2008	53.6	2.3	4.29%
2009	50	4.4	8.8%
2010	231.1	6.5	2.81%

Source: Global Humanitarian Assistance data and statistics.

Over this period only three bilateral donors contributed to disaster prevention and preparedness (Spain, USA and UK). All the projects were focused on natural disasters, on a mix of community early warning, capacity building of government for coordination, and mainstream disaster risk reduction activities.

## Annex 5. International engagement in the security sector in Niger

ECOWAS plays a main role in fostering peace and security in the region. It has sent an African-led International Support Mission to Mali (AFISMA). The AFISMA was authorised by the UN Security Council in December 2012 for an initial period of one year starting in September 2013. However, ECOWAS decided to deploy its forces in January 2013 following the advance by rebel forces and the French military intervention in Mali. AFISMA aims to build the capacity of the Malian military forces. Its goal is to support Mali in its fight against terrorists and help the country to retake control over the Northern part of its territory.

The EU committed funds to the security sector in Niger focusing on resolving conflicts, fighting threats and terrorism, and handling violent extremism and radicalisation. Niger is one of the three focus countries of the EU's Sahel Security and Development Strategy adopted in 2011. This strategy aims at reinforcing national capacities to prevent, manage and resolve conflicts, fight threats and handle violent extremism and radicalisation. The resources already committed or in the pipeline that specifically contribute to the objectives of this strategy amount to approximately €450 million (US\$602.77 million) for the three Sahel countries (Mali, Niger and Mauritania) and the broader West Africa region. Moreover, the EU decided in 2012 to deploy a civilian CSDP Training, Mentoring, Advisory and Assistance mission to Niger aiming to strengthen the capacities of Niger Security Forces (Gendarmerie, Police nationale, Garde nationale) to fight terrorism and organised crime in an effective and coordinated manner. This new European CSDP civilian mission – EUCAP SAHEL Niger – will be running for two years with a budget of €8.7 million per annum.

UNDP is also involved in the security sector. Two of the three BCPR ongoing projects are focusing on security issues in the country. These projects are:

- The US\$987,000 Capacity-Building for Conflict Prevention and Management project, aiming to strengthen national, regional and local institutional capacities in conflict prevention and management.
- The US\$8,627,153 Peace Enforcement in North Niger, including preparedness activities such as enhancing local police force capacities in the 15 municipalities of Agadez and supporting various peace initiatives at the local level.

## Annex 6. Sources of emergency preparedness funding in Niger – projects with known funding as of May 2013

Donor	Channel	Programme or project	Year	Funding (US\$ million)	Type of emergency preparedness activity (where clear)	Full or partial emergency preparedness
Government of Niger		Dispositif (inc. the SAP)	2012 onwards	1.37	National Coordination	Full
EU		Dispositif (inc. the SAP)	2012 onwards	1.95	National Coordination	Full
Multiple partners		Dispositif (inc. the SAP)	2012 onwards	0.88	National Coordination	Full
Multiple donors and national government		Support Plan	2013	100.8	Prepositioning, early warning systems, coordination	Full
EU, multiple donors and NGOs		SIMA	2012 Onwards	0.16	Risk Analysis and Early Warning	Partial
OCHA	CAP	Coordination project led by OCHA	2013	1.25	Coordination	Full
Canada	CAP	WASH project led by CARE	2013	0.19	Sector emergency preparedness	Full
UK	CAP	Nutrition project led by UNICEF	2013	3.54	Sector emergency preparedness	Full
ECHO	CAP	Nutrition project led by Save the Children	2013	1.11	Sector emergency preparedness	Full
Japan	CAP	Health project led by UNICEF	2013	1.24	Sector emergency preparedness	Full
Japan	CAP	Health project led by WHO	2013	0.33	Sector emergency preparedness	Full
Japan	CAP	Health project led by WHO	2013	0.50	Sector emergency preparedness	Full
Japan	CAP	Health project led by WHO	2013	1.64	Sector emergency preparedness	Full
ECHO	CAP	Health project led by MDM	2013	0.12	Sector emergency preparedness	Full
France	CAP	Food Security Project led by FAO	2013	0.68	Sector emergency preparedness	Full
	Peacebuilding Fund	Youth, Peace and Development	2011 onwards	3	Conflict risk analysis	Partial
UNDP	UNDP TRAC 1.1.3 and CPRTTF	Niger Capacity Building for Crises and Disasters Prevention and Management Programme	Ongoing	2.24	Strengthening the Dispositif's risk analysis and early warning, the CCAGC databases, the national and regional multi-risk contingency plans, the regional committees for disaster management as well as journalists' crises communication capacities.	Partial
Multilateral Development Banks	Pilot Program for Climate Resilience (PPCR)	Community Action Project for Climate Resilience (CAPCR) led by IBRD and IFC	2011	64.5	Information and communication on climate forecasting	Partial

Donor	Channel	Programme or project	Year	Funding (US\$ million)	Type of emergency preparedness activity (where clear)	Full or partial emergency preparedness
Multilateral Development Banks	Pilot Program for Climate Resilience (PPCR)	Improvement of Climate Forecasting Systems and Operationalisation of Early Warning Systems (PDIPC) led by AfDB	2012	13.5	Early Warning	Full
GEF and UNDP	Least Developed Country Fund	Implementing NAPA Priority Interventions to Build Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change	2009	14.45 (co-financed)		Partial
GEF and UNDP	Least Developed Country Fund	Scaling up Community-Based Adaptation (CBA) in Niger	2012	17 (co-financed)		Partial
GEF and UNDP	Least Developed Country Fund	Preparing NAPA	2004	0.22 (co-financed)		Partial
Bill & Melinda Gates Foundation		ECB Phase II	2009–2013	5	EP trainings and capacity building, community preparedness	Partial
ECHO, DIFID, CBHA		ECB Phase II	2009–2013	1	EP trainings and capacity building, community preparedness	Partial
International NGOs	Core Funding				Coordination, information management, emergency planning and local training	Partial
AFD		Project Creation of a Climate Change Surveillance System	2013	2	Early Warning	Full
AFD		Budget Support to the Nigerien Government	2013	46.87	Supporting the implementation of the 3N initiative and the Economic and Social Development Programme 2012–2015, including strong emergency-preparedness components.	Partial
		FAO Crisis and Disaster Management Action Plan for 2012–2014 Outcome 1	2012–2014	50	Improving the crisis response plans, implementing community systems for risk analysis and management and enhancing cereal and livestock food banks	Partial
		FAO Crisis and Disaster Management Action Plan for 2012–2014 Outcome 2	2012–2014	75	Improving the assistance to vulnerable communities after a shock by strengthening resilience, food access	Partial
	CERF	UNHCR Project	2012	2	Build the capacity of local authorities to respond to the needs of refugees	Partial
	CERF	WHO and UNICEF Projects	2012	1	Strengthening disease surveillance	Partial

# Case study: financing of emergency preparedness in Sudan

Tom Hockley<sup>1</sup>

## Emergency preparedness: a definition

*“The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards (including conflict and epidemics).*

*This entails readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training, community drills and exercises) and institutional preparedness (coordination arrangements, early warning systems, public education) supported by legal and budgetary frameworks.”*

Kellett and Peters (2013)

## Summary

### A complex political and humanitarian setting

Emergency preparedness takes place within a challenging context in the Republic of Sudan. The country faces crises that arise from natural hazards, conflict and the interface between the two. Since 2011, the emergencies have included floods that affected 270,000 people, an outbreak of yellow fever in Darfur, infestation of desert locusts in the East, and conflict in the state of Blue Nile, South Kordofan and Darfur. Sudan also faces challenges at the macro-economic level, with inflation at over 40%, an external debt of US\$ 42 billion, and from early 2012 to mid-April 2013 an impasse over the flow of oil and the loss of associated revenues.

Significant challenges in implementation of the Comprehensive Peace Agreement (CPA) remain. Since the succession of South Sudan in 2011, conflict has returned to the border states of Blue Nile and South Kordofan. Whilst relatively small in terms of population, the challenges of voter registration and the referendum in Abyei persist. The CPA did not encompass the conflict in Darfur, and the state continues to be the dominant focus of humanitarian aid. Food assistance reaches 3.4 million people in Darfur, including 1.4 million in internal displacement camps.

Both the Government of Sudan and the international community are aware of the need for a transition to recovery and development and the challenges of sustainability. A frequently cited example is that half of the 600 clinics in Darfur are fully funded by the international community with another 25% receiving partial funding. Access and internal security present further challenges: the international community continues to have limited access in Blue Nile, South Kordofan and parts of Darfur. Forty-seven UN Mission in Darfur Peace Keepers have lost their lives in Darfur since 2008.

Sudan experiences frequent and recurring crises determined by a range of hazards, the vulnerability of populations to these hazards, and the capacity of individuals, communities and authorities to respond. Hazards include conflict, floods, drought, agricultural pest outbreaks and epidemics. Sudan is also affected by desertification, soil erosion, sand-storms, rangeland degradation and climate change. The states most affected by natural hazards are North Darfur, North Kordofan, Northern, Red Sea and Kassala. The areas most affected by conflict are Darfur, Blue Nile and South Kordofan.

Risks from natural hazards are exacerbated due to widespread dependence on agriculture and livestock. About 3.5 million people face ‘stressed’ and ‘crisis’ levels of food insecurity (Integrated Food Security Phase Classification Phases 2 and 3).

### Scale and scope of emergency preparedness activities

Emergency preparedness activities are undertaken by individual organisations within sectors and across sectors. The most visible activities are in the health and food security and livelihoods sectors. In the health sector, a five-year National Preparedness Plan is being finalised. However, the recent outbreak of yellow fever in Darfur highlighted that emergency preparedness systems are not yet sufficiently robust. In the food security and livelihood sector, early warning information is supported through the World Food Programme’s Vulnerability Analysis and Mapping, the Famine Early Warning System Network and the Food and Agriculture Organization of the United Nations (FAO); with the latter making significant investments in early warning systems. There is, however, a lack of capacity, funding and information sharing within

<sup>1</sup> Tom Hockley is an independent consultant who prepared this report for the Overseas Development Institute. Note that this report was written largely in the first half of 2013, and completed in August of that year; therefore the information and data contained is correct up to that point.

federal and state level government for early warning, and there is no consolidated early warning system within the government.

The preparedness system for desert locust control has been built over several decades, and provides an example of strong regional and international cooperation. Sudan has been a member of the Commission for Controlling the Desert Locust in the Central Region since 1965. The Plant Protection Directorate within the Ministry of Agriculture coordinates and leads preparedness activities and provides the first operational and financial response. The desert locust early warning system demonstrates a successful example of a Government of Sudan provision for initial response, as well as rapid additional international support via FAO, and international technical cooperation.

Cross-sectoral emergency preparedness has been most successful in the 2010–2011 Referendum Contingency Plan. The US\$ 44 million plan, which was fully funded by donors, enabled the pre-positioning of stocks in anticipation of political unrest. Whilst there was no cause for using the stocks during the January referendum, by mid-2011 unrest in South Kordofan and Abyei necessitated their drawdown. Building on the Referendum Contingency Plan, the UN Office for the Coordination of Humanitarian Affairs (OCHA) is in the process of facilitating a contingency plan for all of Sudan. The plan will determine needs and requirements in addition to those set out in the United Nations and Partner Work Plan. In Abyei, a dry season contingency response plan has been developed, and preparations are underway for a contingency plan for the Abyei referendum.

Another notable example is the Crisis and Recovery Mapping and Analysis Project (CRMA), which included in its first phase the establishment of the Information Management Working Group (IMWG). The group developed an information-sharing platform to provide recovery and development actors with a common package of relevant information for their analysis, planning and programming, including mapping risks facing communities. An evaluation of the CRMA project by the Department for International Development (DFID) and the United Nations Development Programme (UNDP) Bureau for Crisis Prevention and Recovery (BCPR) found it to be a worthwhile investment that holds potential to improve how the UN system operates in the Sudan.

There are also good examples of organisations aligning themselves with corporate global preparedness strategies. These include Plan International, the World Food Programme (WFP) and the Sudanese Red Crescent, who have a dedicated team for emergency preparedness and whose previous activities include a 2005 Disaster Preparedness Training Manual, flood risk mapping with DFID (2002), and more recent activities to promote community based disaster risk reduction (DRR) and resilience.

There are moves to consolidate emergency preparedness efforts, with a national preparedness plan in the health sector, contingency planning for Abyei and all of Sudan, and the United Nations Development Assistance Framework (UNDAF) including policy and legislative support. The latter includes supporting the development of a National Adaptation Plan for Climate Change, a National Disaster Risk Management Strategy and National All Hazard Emergency Preparedness Programme. While there are a number of activities with an emergency preparedness component or objective, there is not yet a consolidated system of emergency preparedness that is based on a comprehensive assessment of risk derived from analysis of hazards, vulnerability and capacity.

## Coordination

Within the Government of Sudan (GoS), there are several ministries that focus on preparedness activities, including agriculture, environment, health, and livestock. For humanitarian activities, overall coordination comes from the High Council for Civil Defence within the Ministry of Interior. In the same ministry, the Humanitarian Aid Commission coordinates humanitarian responses, relief and rehabilitation. An early warning centre is located within the Humanitarian Aid Commission, although it is not fully functional, likely due to the challenges of attracting government resources.

The Government of Sudan is moving towards a Disaster Risk Management Strategy and a coordinating mechanism for the Hyogo Framework of Action. There is good collaboration between government and regional/international actors on climate change (e.g. the International Climate Prediction and Applications Centre), animal disease, and food security (e.g. Famine Early Warning System Network, FEWSNET).

However, emergency preparedness does not have a clear focal point either in government or the UN system, and no specific structures to consolidate emergency preparedness initiatives undertaken by individual agencies. Consolidating emergency preparedness activities will require a lead from government and a dedicated focal point within the United Nations system.

## International assistance

Assistance to Sudan from the international community continues to be primarily humanitarian, with the 2013 United Nations and Partner Work Plan appealing for over US\$ 983 million to implement 364 projects. The objectives of the Work Plan include the building of capacity of national actors to address humanitarian needs in Sudan, which is a prerequisite for the transition to recovery and development. This is complimented by the 2013–2016 United Nations Development Assistance Framework, which has a budget of US\$ 877 million.

The last two years has seen a decrease in the funds available for humanitarian interventions, with the Work Plan receiving US\$ 741 million in 2011 and US\$ 586 million in 2012. This downward trajectory is likely to continue, both increasing the challenge of delivering humanitarian assistance, and increasing the momentum for transition.

International development assistance is limited, and this is unlikely to change given United States sanctions and arrears in debt repayments. Whilst Arab states may increase development contributions, the most likely scenario is decreasing humanitarian resources and continued constraints on development resources.

### Financing emergency preparedness

With the notable exception of the financing of the referendum contingency plan, the UN and Partner Work Plan is the main source of funds for emergency preparedness. Within the Work Plan, emergency preparedness activities are usually included as a component of a response project. There is no requirement to disaggregate either the activities to be undertaken for emergency preparedness or the proportion of the project funding that is dedicated to this purpose. Thus it is difficult to determine the volume of funds dedicated to emergency preparedness. Additionally, projects are more likely to be funded if they are geared towards emergency response.

For the 2012 Work Plan, emergency preparedness equated to approximately US\$ 20.9 million of the funds requested and US\$ 16.4 million of those disbursed. Although substantive in monetary terms, they are modest in relation to the scale of the 2012 Work Plan, equating to around only 3% of the total Work Plan funds. Of the US\$ 16.4 million received, a single health project accounts for US\$ 15 million. This lends further weight to the sense that investment in emergency preparedness is low. However, comparisons with volumes of humanitarian assistance do not in and of themselves indicate shortages in emergency preparedness financing.

(Note that the tracking of financing for emergency preparedness activities is essential for identifying gaps.)

A more detailed analysis of projects in the 2013 Work Plan found that 16% of projects had an emergency preparedness component, with their objectives including contingency planning, the pre-positioning of stocks, risk assessment and early warning, training, coordination, community preparedness and risk reduction. The first round allocation of US\$ 14.8 million for the 2013 Common Humanitarian Fund includes emergency preparedness activities. Special allocations were made for pre-positioning seeds, tools, livestock vaccines and drugs, non-food items and emergency shelter and ready-to-use therapeutic foods.

Outside of the Work Plan, few funds are available for emergency preparedness. This study was unable to access the GoS budget. However, line ministry staff interviewed indicated that, whilst they have access to an emergency contingency response budget, access to preparedness funds was usually not possible. The exception was the Ministry of Health, which received US\$ 680,000 in 2012 for purchasing equipment as part of a preparedness budget line.

The analysis of individual projects provides some indication of the investments needed in emergency preparedness. In the health sector the funds committed to developing a National Preparedness Plan, and to put in place capacity and contingency stocks exceed the US\$ 15 million requested in 2012. In terms of proportions of budgets, the 2012 WHO Emergency Programme in Sudan used US\$ 13.8 million of which an estimated US\$ 3.7 million (27%) was for specific preparedness activities.

### Barriers to emergency preparedness

Despite the promising advances in the health, food security and livelihoods sectors and the pan-Sudan contingency planning, significant barriers to emergency preparedness remain. The lack of a preparedness focal point within government, the UN and donors, in particular for early warning, risks the duplication of efforts and the ineffective use of information. Early warning systems will need to accommodate the capacity of federal and state government, and a multi-year commitment is required to develop capacity. While individual agencies are taking forward preparedness activities, there remains a lack of consolidated plans for emergency preparedness at the federal, state and sector level, with the exception of the health sector.

Funding emergency preparedness through humanitarian budget setting inappropriately forces long-term preparedness activities, such as early warning, into one year funding cycles. Emergency preparedness tends to be incorporated into wider response activities. With few incentives to highlight emergency preparedness activities, their visibility tends to be low. Emergency preparedness is not given an equal weighting to emergency response, which is reflected in the coordination and funding arrangements.

### The way forward

Donor support is needed for emergency preparedness, including dedicated projects and budget lines and incentives to make preparedness activities more visible. The objectives of the 2013 Sudan CAP include the potential to support multiple aspects of preparedness, in particular to build the capacity of national actors to meet humanitarian needs. However, emergency

preparedness programming needs to break the fetters of 12-month funding cycles, as many elements require funding cycles of 3–5 years. Contingency planning has been demonstrated as effective, and future contingency planning in Abyei and the rest of Sudan merits support.

Emergency preparedness programming could enable closer collaboration between government and local actors and provide an opportunity to build their capacity to prepare for and respond to natural and conflict-related disasters. A modest start in a single state, perhaps Kassala, where much work has already been done, would allow the GoS and the international community to test the value of a more consolidated approach to preparedness. A focus on a single state, combined with better tracking and analysis of the funds and activities dedicated to emergency preparedness, would provide the parameters for a convincing pilot.

Focal points in government and the UN system are also required, to enable appropriate sharing and use of information, to avoid duplication and increase attention to emergency preparedness.

## Introduction

### Country context and background

The Comprehensive Peace Agreement (CPA) signed in 2005 between the Government of Sudan (GoS) and the Southern People's Liberation Movement (SPLM) comprised a set of agreements on the sharing of wealth and power, and a referendum that led to the creation of the Republic of South Sudan. The CPA also set out administrative arrangements for state governments in Blue Nile and South Kordofan, a process for defining borders in Abyei, and a process of voter registration in Abyei to be followed by a referendum to determine whether Abyei joins Sudan or South Sudan. Whilst the CPA considered administrative, power and wealth sharing between the GoS and the SPLM, the resolution of conflict in Darfur fell outside the scope of the CPA. Significant challenges in implementing the CPA remain, with conflict returning to the border states of Blue Nile and South Kordofan. Whilst relatively small in terms of population, the challenge of voter registration and the referendum in Abyei persist.

During the research period for this country case study, oil exports from South Sudan were suspended, resulting in a noteworthy loss of oil revenues<sup>2</sup>. Despite a currency devaluation of 90% in 2012, inflation remains at over 40%, with increases in the price of food and essential commodities having negative impacts at both the national and village levels.

<sup>2</sup> Oil flows resumed in mid-April 2013.

The crisis in Darfur remains the focus of humanitarian assistance. Food assistance reaches 3.4 million people in Darfur, including 1.4 million in internally displaced person (IDP) camps. Both the GoS and the international community are cognisant of the need for transitioning to recovery and development, and of the challenges of sustainability: A frequently cited example is that half of the 600 clinics in Darfur are fully funded by the international community, while of the remainder, 25% receive partial funding. Recent initiatives to address humanitarian need in Darfur include the creation of the Darfur Regional Authority and the Darfur Joint Assessment Mission. A policy of 'Sudanization' is being developed by the Humanitarian Aid Commission (HAC) that focuses on developing the capacity of national NGOs by stipulating that INGOs should have a national NGO partner.

Access to many areas of Sudan continues to be either challenging or impossible<sup>3</sup> and risks in humanitarian delivery persist. Forty-seven United Nations Mission in Darfur (UNAMID) peace keepers have lost their lives in Darfur since 2008 while a new conflict has emerged linked to gold mining in North Darfur.

The 2013 United Nations and Partners Work Plan (Work Plan) reflects both the continuing humanitarian needs as well as the need for transition. The Work Plan appeals for US\$ 983 million to fund 364 projects against the following strategic priorities:

- Contribute to a timely and effective humanitarian response throughout Sudan.
- Promote and facilitate durable solutions, empowering people and communities by reducing aid dependence.
- Build the capacity of national actors to address humanitarian needs in Sudan.

### The risk context

#### Overview

Sudan experiences frequent and recurring crises that are determined by a range of hazards; the vulnerability of populations to these hazards; and the capacity of individuals, communities and authorities to respond. These hazards are both natural and conflict-related, and are often interlinked. Overlaying these are the

<sup>3</sup> An aide memoire signed between the African Union, Office of the Special Envoy of the League of Arab States, and the Office of the Special Envoy of the Secretary General for Sudan, setting out a proposal for the delivery of humanitarian assistance in South Kordofan and Blue Nile, has yet to be agreed and enacted. In addition nine economic, trade and security related agreements were signed in Addis Ababa by Sudan and South Sudan. These include the 'four freedoms' agreement giving South Sudanese in Sudan and Sudanese in South Sudan the freedom to reside, move, acquire, and dispose of property, and to undertake economic activities in both states. The agreement remains to be ratified by the parliaments.

macro-economic challenges that impact both national finances and the purchasing power of rural households.

A timeline (Annex 3) since 2005 shows recurring conflict, floods, drought, agricultural pest outbreaks and risks to health. A shorter horizon from UN Office for the Coordination of Humanitarian Affairs (OCHA) updates from 2011 shows recent and on-going crises (Table 1).

### Hazards

Most people in Sudan gain their livelihoods from agriculture and livestock, exacerbating the risks from natural hazards. Floods are frequent, caused by the overflowing of the waters of the Nile and its tributaries and by flash floods associated with heavy localised rainfall (see Annex 4).<sup>4</sup> Flooding in 2012 affected approximately 270,000 people (see Table 1). Though less frequent than floods, droughts have historically led to the largest loss of life, such as the devastating droughts in the 1980s. Between July and December 2011, about 1.7 million people were affected by drought in Darfur, North Kordofan, Red Sea, Blue Nile, White Nile and Kassala states. Numerous factors, including conflict, poverty and natural hazards, contribute to food insecurity. As of January 2013, about 3.5 million people faced 'stressed' and 'crisis' levels of food insecurity (Integrated Food Security Phase Classification phases 2 and 3); with 80% of the food insecure population located in the conflict-affected areas of Darfur, South Kordofan, Blue Nile and Abyei (see Annex 4).

Sudan is impacted by desertification, soil erosion, sand-storms, and climate change. The Sudan National Communication to the UN Framework Convention on Climate Change (UNFCCC) indicates that climate change will have severe impacts upon Sudan in terms of its exposure to extreme events such as droughts and flooding, and the vulnerability of the water, agriculture and public health sectors.

There are linkages between deforestation, water resource depletion, and conflicts over resources. In Darfur, stakeholders expressed concern over the environmental impacts of charcoal production, brick production and water consumption beyond the capacity for recharge. Rangeland degradation has been exacerbated by the challenges related to pastoral routes between North Sudan and South Sudan (see Annex 4). In 2013, the GoS was addressing an infestation of desert locusts in the east of the country. The last major outbreak of desert locusts had been in 2003.

Epidemics are prevalent, with meningitis outbreaks in the dry season and acute diarrhoea, and cholera and malaria in the rainy season. The 2012 outbreak of yellow

**Table 1. Crises in Sudan since 2011**

Year	Event
2011	<ul style="list-style-type: none"> <li>• <b>Renewed conflict</b> in South Kordofan and Blue Nile.</li> </ul>
2012	<ul style="list-style-type: none"> <li>• <b>High food prices</b> fuelled by inflation.</li> <li>• Lack of political settlement increased the challenges of <b>pastoralist migratory routes</b> between North and South (in particular Misseriya in the Abeyei area and Rezeigat from South and East Darfur) leading to concerns on resource degradation and conflict.</li> <li>• 270,000 people were affected by <b>flooding</b> with 68 people killed and 54 injured. 36,000 homes were damaged, 14,000 houses destroyed and 35,000 livestock lost. The worst affected states were Kassala, South Darfur, Gedaref and Sennar.</li> <li>• The outbreak of <b>yellow fever</b> in Darfur was cited as one of the worst outbreaks in the world in the last 20 years. 849 cases were reported between September and December, with 171 deaths. A vaccination campaign reached over 3.5 million people.</li> </ul>
2013	<ul style="list-style-type: none"> <li>• <b>Conflict</b> between Northern Reizegat (Aballa) and Beni Hussein tribes in the Jebel Amir gold mining area in North Darfur.</li> <li>• An infestation of <b>desert locust</b> in the East.</li> </ul>

Source: OCHA.

fever in Darfur was one of the worst outbreaks in the world of this disease in the last 20 years (see Annex 4). Over 840 cases and 171 deaths were reported between September and December 2012. A vaccination campaign reached over 3.5 million people. The previous yellow fever outbreak was in South Kordofan in 2005, with 604 cases and 163 deaths. In 2011, there were confirmed cases in Darfur of diphtheria, meningitis and measles.

The causes and manifestations of conflict are diverse. These were characterised during preparations for national consultations on the post-2015 global development agenda as:

- local level conflicts
- conflicts over the residual elements of the CPA
- conflicts over investment capital
- internal regional conflicts
- conflict with cross-border dimensions.

At the time of research, there was on-going conflict in the Blue Nile and South Kordofan states, as well as conflict between the Northern Reizegat (Aballa) and Beni Hussein tribes in the Jebel Amir gold mining area in North Darfur. These have led to significant movement of people, both as IDPs and refugees (see Annex 4). In Darfur alone, more than 2 million people have been displaced since 2003.

<sup>4</sup> Floods have occurred in 1994, 1996, 1998, 1999, 2002, 2005, 2007, 2009, 2010 and 2012.

## Vulnerability

The risks that people face are a factor of hazards, vulnerability and capacity to cope and respond. With 80% of the population dependent on agriculture and livestock for their livelihoods, the impacts of hydro-meteorological events, the degradation of rangelands, changes in pastoral migration patterns, pests, diseases, and conflict leave many Sudanese vulnerable to food insecurity and the negative impacts of shocks. The states most affected by natural hazards are North Darfur, North Kordofan, Northern State, Red Sea State and Kassala states. The areas most affected by conflict are Darfur, Blue Nile and South Kordofan.

Vulnerability is exacerbated by wider macro-economic challenges, impacting the capacity of the GoS to build capacity to prepare for and respond to disasters. The research took place at a time when revenues from oil were frozen, external debt stood at US\$ 42 billion and inflation exceeded 40%. This has resulted in impacts at the national level and household levels; in 2011 staple food prices increased by 20%. For those most vulnerable to food insecurity (e.g. IDPs, returnees, refugees, poor households), the impacts of price inflation have been significant.

## Emergency preparedness activities and plans

### United Nations and Partners Work Plan, 2013

A word search of projects in the Work Plan (Annex 5), using the key terms in the definition of emergency preparedness set out in the inception report, showed that 16% of projects (57 projects from a total of 364 projects) have a component of emergency preparedness. Most of these projects were in the health and food security and livelihoods sectors. Capacity building, contingency planning and pre-placement of stocks were prominent, with projects in the following sectors – coordination and common services, logistics and emergency telecommunications, non-food items and shelter, protection, return and reintegration, and water, sanitation and hygiene.

### Health sector

The Ministry of Health (MoH), with support from the UN World Health Organization (WHO), has undertaken a national capacity assessment that will form the basis of the GoS's Five Year National Preparedness Plan. This includes a safe hospital assessment using an international index for disaster safe hospitals and vulnerability risk assessment mapping. An annual programme provides training to provincial health workers, with routine surveillance and the pre-positioning of health stocks including vaccines.

The MoH has developed emergency state profiles for nine states. The Emergency State Profile for Blue Nile State is a comprehensive plan including a hazard risk assessment, the impact of past disasters, government plans and policies and the priority needs within the health sector.

Both WHO and MoH indicated that the emergency preparedness systems were not sufficiently robust to deal with the recent outbreak of yellow fever in Darfur. Samples had to be sent to Dakar (Senegal) for testing, a constraint that is now being addressed by building relevant capacity in Darfur State.

### Food security and livelihoods

There has been considerable investment in early warning systems for the food security and livelihoods sector. FAO has provided long-term support to build the capacity of the Ministry of Agriculture (MOA) at federal government level through the Sudan Institutional Capacity Programme Food Security Information for Action (SIFSIA). The five-year US\$ 11.6 million intervention included an early warning system that integrates data on rainfall, market prices, food prices and crop assessment.

The MoA and FAO recognise that there is insufficient capacity within government to continue the early warning system as devised, and the FAO support provides some key lessons in terms of capacity. Effective early warning requires sustainable capacity across government departments, and both the MoA and HAC have faced challenges in making their early warning departments operational, including attracting financial resources for early warning, as well as blockages to information flows between federal government departments and between federal and state government. The MoA includes an emergency preparedness component in its annual budgets, but these do not attract funds. FAO, MoA and HAC point to potential ways forward, with future capacity built on a sharing of the cost of the intervention (both financial and human resources), and on the design of interventions appropriate to the capacity of federal and state governments.

The sector also benefits from analysis from the WFP Vulnerability Analysis and Mapping (VAM) Unit as well as FEWSNET. The former has an important role given the size of the WFP programme (US\$ 323 million) in the Work Plan. The sector also provides a good example of regional and global early warning systems for desert locusts (see Box 1).

### Capacity building

Building the capacity of state and non-state actors is a strong priority for the UN and partners, and is reflected in one of the three strategic objectives of the Work Plan. The need is given emphasis in relation to Darfur and the transition to recovery and development. The challenges

### Box 1. Preparedness and response: desert locusts

Sudan is one of the most at-risk countries from desert locusts, with potential summer outbreaks in the belt from Chad to the Eritrean border, and potential winter outbreaks as the pests move to the Red Sea coast. The summer area includes Darfur and West Kordofan, which are not always accessible to teams from the MoA's Plant Protection Directorate. The directorate has a dedicated Desert Locust Section with survey and operational teams. The directorate is supported by the Commission for Controlling the Desert Locust in the Central Region (CRC), which was established in 1965 and is based in Cairo, and by FAO who run a global early warning system. On a daily basis the survey teams from the Plant Protection Directorate collect survey data in the field that is sent in real time to the office in Khartoum, and collated for submission to the global early warning system.

Preparedness and response for desert locusts is the responsibility of, and is led by, the GoS. The Plant Protection Directorate is nationally funded and its capacity has been built over several decades. Sudan provides an annual contribution (around US\$ 18,000) to the Trust Fund of CRC. The Trust Fund has 16 contributing countries and at present reserves are close to US\$ 2 million.

The Plant Protection Directorate provides finances for an initial response. The finance provided by the GoS for the present outbreak has been substantial; the drawdown from strategic chemical stocks alone to treat 200,000 hectares is in the order of US\$ 2 million. Through FAO, further contributions have been provided (US\$ 400,000 from Saudi Arabia for vehicles, US\$ 75,000 from CRC for spraying equipment, and US\$ 400,000 from FAO for equipment and training). Once identified, the speed of response to a desert locust infestation is critical, and the additional support through FAO was pledged, received and disbursed within three weeks.

There is very good technical cooperation between countries, with a recent meeting between the presidents of Sudan and Egypt touching on the issue. Another meeting has been scheduled between the relevant ministries from Egypt, Eritrea and Sudan. The GoS is also discussing with Saudi Arabia how they could support locust control, given that Saudi Arabia may be affected.

Although outside the scope of this study, discussions on the outbreak of desert locusts led to comparisons in North and West Africa, which benefit from US\$ 3.3 million in annual preventative measure across 10 countries in North and West Africa. A similar investment in Sudan could have saved much of the US\$ 570 million that was spent on the control operations needed in 2003–2005.

include addressing the capacity gap between federal and state government and of national NGOs.

Several partners (including Catholic Relief Services, Norwegian Church Aid and Jasmara Human Security Organisation) included projects in the Work Plan aimed at building the capacity of communities for disaster preparedness and disaster risk reduction. Community networks, often voluntary, are supported to provide early warning and response for natural and conflict-related disasters. The NGO Mubadiroon has a network of 3,500 volunteers in Central and West Darfur, and in South Kordofan the NGO Nuba Mountains International Association for Development (NMAID) has volunteers organised as 'rapid response prevention protection teams'. Both NGOs emphasised the lack of material support they were able to provide to volunteers, including mobile phones.

### Contingency planning and pre-positioning stocks

The pre-positioning of stocks is incorporated into several sectors. The 2013 Common Humanitarian Fund (CHF) includes special allocations for pre-positioning seeds, tools, livestock vaccines and drugs, non-food items and emergency shelter, and ready-to-use therapeutic foods.

A successful example of contingency planning was the 2011 Referendum Contingency Plan. Three months before the January 2011 referendum, a US\$ 44 million cross-sectoral contingency plan was finalised (US\$ 27 million was targeted to South Sudan). The plan, which was fully funded by donors, enabled the pre-positioning of stocks in anticipation of potential political unrest (see Box 2). Whilst there was no immediate cause for use of stocks during the January referendum, they were used to respond to unrest in South Kordofan and Abyei in mid-2011.

OCHA is in the process of facilitating a contingency plan for all of Sudan, which will determine requirements in addition to those set out in the Work Plan. The plan will include the pre-placement of stocks based on scenario planning. In Abyei, a dry season contingency response plan has been developed and preparations are underway for a contingency plan for the Abyei referendum. The model will follow the referendum plan from 2011, while recognising the particular situation of Abyei. The planning is led by the OCHA coordinator in Abyei.

### Information management: CRMA and the Information Management Working Group

Through the Crisis and Recovery Mapping and Analysis Project (CRMA), UNDP has undertaken participatory mapping and analysis to enhance crisis responsiveness and evidence-based planning both within the UN system and the national government (Indreboe Alshaikh

**Box 2.**  
**Sudan inter-agency referendum-related humanitarian contingency plan for November 2010 to June 2011**

The inter-agency contingency plan was developed in consultation with government and local authorities, UN agencies, non-governmental organisations and donor partners. The plan covered North and South Sudan, and prepared for a worst case scenario, which envisaged inter-tribal clashes and a large outflow of people to neighbouring countries. It envisaged a potential caseload of 2.8 million IDPs, with an additional 3.2 million people affected by the conflict and a breakdown in trade and social service delivery.

The design of emergency interventions incorporated a rights-based approach and agreed minimum standards such as the SPHERE minimum standards in core areas of humanitarian assistance. An emergency operations team was to be activated at the onset of the crisis. The plan called for pre-positioning three months of core emergency pipeline supplies in hubs located both near areas where violence was considered most likely to erupt as well as areas where at-risk populations were thought likely to concentrate. Triggers were identified and monitored to indicate whether a worst-case scenario was unfolding.

The plan considered the need for emergency repairs along key access roads and corridors, and the need for standby human resource capacity. As part of the contingency planning, negotiations were undertaken for an access framework in Blue Nile, South Kordofan and Abyei. The plan considered a risk context that encompassed dimensions of politics (CPA and the referendum), wealth (oil), conflict, pastoralist movements, challenges of militias, of regional interests, of citizenship, protection, of vulnerability of communities along borders, and of livelihoods and coping strategies.

and Puig Larrauri 2012). CRMA has been supported by US\$ 10 million from DFID (UNDP, no date). UNDP has collaborated with state departments of planning in Eastern Sudan, Blue Nile, South Kordofan, and Darfur. An evaluation of the first phase of the CRMA project conducted by DFID and UNDP BCPR in 2010 found it to be cost-efficient and cost-effective, and overall that it was a worthwhile investment that held the potential to improve how the UN system operates in the Sudan (DFID, 2012).

In 2008, during the first phase of CRMA, the Information Management Working Group (IMWG) was created to develop a coherent information management approach, support UNDAF processes, improve development planning and programming and support decentralised information sharing and common geographical information system (GIS) mapping. Participating UN Country Team

members signed an information-sharing protocol and proposed the following four integrated information management tools:

- 4Ws database (who does what, where, and when) for project tracking and coordination.
- Incident and events mapper (for UNAMID).
- Basic service mapper for tracking services, functionality and delivery gaps.
- Crisis and recovery mapper for tracking community level threats and risks.

The 4Ws, coordinated by OCHA, provides an important input for emergency preparedness planning. A quarterly atlas, digitised and compiled through the CRMA project is produced in order to provide situation analysis to inform state strategic planning. The Blue Nile Situation Analysis for October 2010 provides an example of the potential of this inter-agency initiative. The analysis covers natural hazards and conflict, including a section on 'threats to community stability'.

The CRMA project staff consulted expressed the need for an interlocutor at the federal level who is willing and able to take responsibility for the tool and confirmation from the UN Country Team (UNCT) that the project is acceptable as an inter-agency tool.

**Institutional focus**

The institutional focus on preparedness by organisations corresponds to agencies' priorities. Disaster preparedness is a global performance indicator for Plan International, and with German government funding they are undertaking vulnerability analysis and contingency planning in flood prone areas in two states in Sudan. This includes setting up disaster preparedness and response groups comprised of members of government and national NGOs from the localities.

The Sudanese Red Crescent (SRC) has a dedicated team for disaster management and has been working on this subject for over 10 years. Past activities include a 2005 Disaster Preparedness Training Manual (jointly with the University of Sudan), flood risk mapping with DFID (2002), and more recently community based disaster risk reduction (DRR) and resilience for floods (ECHO funding). The SRC operate a Disaster Management Information System (DMIS) for hydro-meteorological events. Information cascades from communities to regional and international response teams and is coordinated with the Sudan Meteorological Institute and International Climate Prediction and Applications Centre (ICPAC). However, despite their long history of engaging in disaster management, funds for preparedness do not appear to be readily available. Such financing tends to be a component of the Disaster Relief Emergency Funds (DREF), which is a mixed grant/loan facility of the

International Federation of Red Cross and Red Crescent Societies (IFRC).

Based on an executive board decision in 2009, WFP is moving from contingency planning to an Emergency Preparedness and Response Package (EPRP). This approach provides risk profiles for natural hazards, and preparedness analysis and response actions across WFP units and geographic locations. Funds to implement the package and other preparedness activities are loaned from a global fund in Rome.

### Summary: how prepared are we?

In Sudan, emergency preparedness activities are taking place across many of the categories of emergency preparedness defined in the inception report (ODI, 2012), including readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training) and institutional preparedness (coordination arrangements, early warning systems). The most comprehensive examples of emergency preparedness are the inter-agency contingency plans. To date these have been facilitated around specific events – namely the 2011 referendum and the future referendum in Abyei.

Much of the focus has been on contingency planning, information-sharing and early warning. Despite considerable investment in early warning in the food security and livelihood sector, there is no single such system functioning within government. With the exception of the health sector, there is limited support to the development of policy and legislation. Subject to funding, such efforts will increase under the UNDAF, in the form of a National Adaptation Plan for Climate Change and a Disaster Risk Management Strategy. Individual sectors are generating information for emergency preparedness, and the full potential of the inter-agency protocol and outputs from the IMWG are not yet realised.

While there are many activities with emergency preparedness components and objectives, there is no consolidated system of emergency preparedness that is based on a comprehensive assessment of risk derived from analysis of hazards, vulnerability and capacity. The reasons for this are examined in section 5 of this paper, which considers in more detail the barriers to emergency preparedness.

## Key preparedness stakeholders and structures

### Actors and mandates

#### Government of Sudan

The mandate of the High Council for Civil Defence (HCCD) within Sudan's Ministry of Interior Affairs includes

emergency coordination and disaster management. The Civil Defence Department serves as its secretariat and implementing body; and it has representation at the state level. Also within the Ministry of Interior Affairs, the HAC holds the mandate for coordinating the humanitarian response, relief and rehabilitation. HAC has three directorates: Emergency and Humanitarian Programmes, Joint Procedures Centre, and the IDP National Centre. An Early Warning Centre is located under the Emergency and Humanitarian Programmes, although HAC said that the capacity of the centre is very limited. Other government ministries and departments have specific roles in relation to their mandates:

- The Higher Council for Environment and Natural Resources (HCENR) enforces legal frameworks related to environmental protection.
- The Ministry of Environment has responsibilities that include the National Plan of Action for climate change and for national communications to the UNFCCC.
- The Sudan Meteorological Authority (SMA) is within the Ministry of Environment, and plays an important role in early warning systems.
- The Ministry of Agriculture cooperates with the Desert Locust Information Service (DLIS), and Desert Locust Control Organisation (DLCO). This ministry includes preparedness activities in its annual budget but said that funds for this are usually not received.
- The Ministry of Animal Resources undertakes livestock surveillance and provides reports to the World Organisation for Animal Health (OIE).
- The Ministry of Water Resources and Energy has the mandate to manage riverine and ground water resources.
- The Ministry of Health is developing a National Preparedness and Response Plan housed within the Disaster Risk Reduction Department.<sup>5</sup>
- The Strategic Reserve Authority (SRA), housed within the Commercial Bank of Sudan, has been used for preparedness and response, as well as price control.

### Regional bodies

In terms of regional and international interlocutors, the most active relations appear to be with the IGAD International Climate Prediction and Applications Centre (ICPAC) and the Desert Locust Programme. There was no indication of strong links to the IGAD Centre for Early Warning and Response Mechanism (CEWARN).

### United Nations

Within the UN system, the UN Humanitarian Country Team is supported by 14 sectors. Due to lack of resources and a surge in humanitarian needs, the UN coordination in Blue Nile and South Kordofan had moved from the

<sup>5</sup> This department has five units – preparedness and risk reduction, response, disaster information, organisational coordination, and hospital emergencies.

Resident Coordinators Support Offices (RCSO) to OCHA. The OCHA coordinator in Abyei liaises with both OCHA Khartoum and Juba and reports directly to New York.

UNDP, in collaboration with the United National Environment Programme (UNEP) and the United Nations International Strategy for Disaster Reduction (UNISDR), is assisting the GoS to develop a disaster risk management programme. Representatives from GoS will attend the first Arab States Platform for Disaster Risk Reduction in March 2013, which provides an entry point to strengthen engagement with the Hyogo Framework.

### Civil society

The Sudan Council of Voluntary Agencies (SCOVA) acts as an umbrella organisation for 300 national NGOs. It is a member of the sector coordination meetings.

### Challenges: coordination for emergency preparedness

Whilst several government entities play a role in providing information and supporting the coordination for emergency preparedness, their ability to deliver is limited. The challenges of attracting government resources for emergency preparedness and coordination are reflected in the absence of a fully functioning early warning department within HAC as well as the challenges facing early warning systems in MoA. Within the UN system

there is neither a focal point for emergency preparedness nor specific structures to consolidate emergency preparedness work undertaken by individual agencies and in different sectors.

## Emergency preparedness funding

### General aid profile for Sudan

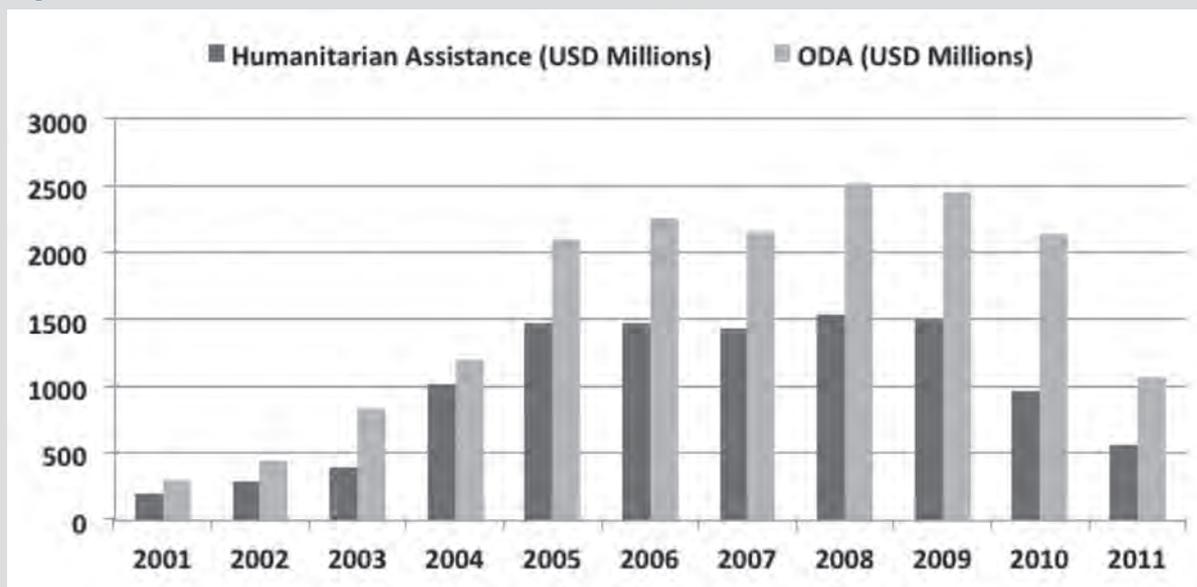
In the last decade, Sudan has been a major recipient of humanitarian aid and overseas development assistance (ODA). It was amongst the top ten recipients of ODA for every year between 2006 and 2010, though this aid then declined considerably from peak levels (Figure 1). Between 2002 and 2011, Sudan was the largest recipient of humanitarian assistance by some distance, receiving US\$10.6 billion during this period. In 2013, Sudan was the fourth largest recipient of funding through the UN Consolidated Appeals Processes (behind Syria,<sup>6</sup> South Sudan and the Democratic Republic of Congo) (Global Humanitarian Assistance, 2013).

### United Nations and Partner Work Plan, 2013

#### Overview

The United Nations and Partner Work Plan, 2013<sup>8</sup> (the Work Plan) sets out the foreseeable annual humanitarian

Figure 1. International assistance to Sudan 2001–2011



Source: Global Humanitarian Assistance (Development Initiative).<sup>7</sup>

<sup>6</sup> Syria is not included in the CAP, but it does have two UN appeals. See: <http://www.globalhumanitarianassistance.org/data-guides/datastore>

<sup>7</sup> See: <http://www.globalhumanitarianassistance.org/data-guides/datastore>

<sup>8</sup> See: [https://docs.unocha.org/sites/dms/CAP/2013\\_Sudan\\_Workplan.pdf](https://docs.unocha.org/sites/dms/CAP/2013_Sudan_Workplan.pdf)

needs in Sudan. It requests US\$ 983 million against the following three strategic priorities:

- Contribute to timely and effective humanitarian response throughout Sudan.
- Promote and facilitate durable solutions, empowering people and communities by reducing aid dependence.
- Build capacity of national actors to address humanitarian needs in Sudan.

The largest sectors in terms of financial requirements are food security and livelihoods (41%), refugee multi-sector (9.4%), education (8.6%), health (7.7%), and water, sanitation and hygiene (6.7%). The Work Plan reflects the increasing focus on longer-term assistance aimed at recovery and durable solutions reflected by the relative decrease (from 53% in 2007 to 36% in 2013) in the proportion of funds targeted to food assistance, non-food items and emergency shelter. The objectives of the 2013 Sudan CAP include the potential to support multiple aspects of preparedness, in particular to build the capacity of national actors to meet humanitarian needs.

Sudan has been one of the largest annual recipients of humanitarian aid for a number of years, although the last two years has seen a reduction in assistance received. In 2011, a total of US\$ 741 million was received (66% of the total requested), and in 2012 a total of US\$ 586 million was received (55% of the total requested).

Funding will depend on the humanitarian situation, but a reduction in overall humanitarian assistance is expected to continue. Humanitarian funding dominates the portfolios of most donors, and the Work Plan is the main planning framework for project and programme financing for UN and partner organisations. It is not clear to what extent recovery and development funds will be available to compensate for any reduction in humanitarian funding. However, a reasonable hypothesis is an overall decrease in donor funding. A decrease would have implications for the delivery of humanitarian aid and for the willingness and ability of aid agencies to take forward preparedness activities through humanitarian channels.

### Common Humanitarian Fund

The Common Humanitarian Fund (CHF) Policy Paper for the 1st Round Allocation of US\$ 14.8 million recommends priorities against which approved Work Plan projects will be funded. These include projects that are time sensitive or have specific seasonality, with special allocations for:

- pre-positioning seeds, tools, livestock vaccines and drugs
- pre-positioning non-food items and emergency shelter
- pre-positioning ready to use therapeutic foods (RUTF).

Sector priorities within CHF also include emergency preparedness through:

- strengthening the capacity of national actors (coordination and common services)
- strengthening coordination and the capacity of state and non-state actors for effective and timely responses (food security and livelihoods)
- improved emergency preparedness, risk reduction, disease surveillance (health)
- predictable logistical responses (logistics and emergency telecommunications)
- core pipelines stocks (non-food items and emergency shelter)
- national capacity and core pipeline stocks (nutrition)
- early warning mechanisms (protection)
- disaster preparedness through building capacity (water, sanitation and hygiene).

### Central Emergency Response Fund (CERF)

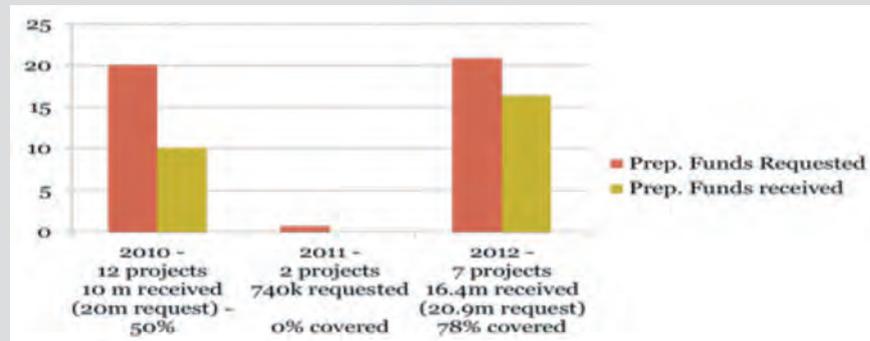
The CERF is a humanitarian fund established by the United Nations General Assembly to enable more timely and reliable humanitarian assistance, with the objectives of promoting rapid responses and responding to underfunded crises. Whilst the CHF provides scope for emergency preparedness through pre-positioning stocks, the primary focus of the CERF is on humanitarian responses. Sudan received US\$ 17 million in 2013 from the global allocation of US\$ 100 million, which was made in January. In 2012, an allocation of US\$ 14 million was made to finance underfunded priority activities from the Work Plan. The CERF does not explicitly fund emergency preparedness activities and is therefore unlikely to emerge as a major channel for financing preparedness.

### Work plans

This study analysed work plans from 2010–2013 in an effort to quantify the amount of funding allocated to emergency preparedness. A 'word search' was conducted for 'preparedness' in the 2010–2012 work plans (see Figure 2). This is a limitation because emergency preparedness covers a wide range of activities that are not necessarily explicitly described as such. For example, the figures for 2011 are misleading as they do not show the single largest contribution to emergency preparedness (the US\$ 44 million for the 2011 referendum contingency plan).

It is still, however, possible to draw some analysis from this exercise. For 2012, on the one hand the funds requested and received for emergency preparedness proposals are substantial, equating to US\$ 20.9 million and US\$ 16.4 million respectively. On the other hand, within the scale of the 2012 Work Plan the percentage requested for emergency preparedness is modest, equating to around 3% of the total. Of the US\$ 16.4 million for the seven projects requesting emergency preparedness funds in 2012, a single health project<sup>9</sup> accounted for US\$ 15 million. This lends further weight to the sense

**Figure 2. Financing for emergency preparedness in Sudan work plans, 2010–2012 (US\$)**



Source: Based on word search on preparedness in the plans.

that investment in emergency preparedness is low. At the same time, comparisons with volumes of humanitarian assistance do not in and of themselves indicate shortages in emergency preparedness financing. (Note that the tracking of financing for emergency preparedness activities is essential for identifying gaps.)

A more detailed analysis of 2013 projects (see Annex 5) looked at titles and project descriptions. Projects cover a wide range of emergency preparedness activities, including contingency planning, the pre-positioning of stocks, risk assessments and early warning, training, coordination, community preparedness and risk reduction. Of the 364 projects, 57 projects had at least one component of emergency preparedness. The value of these projects is approximately US\$ 100 million (or 10% of the total). Note that this excludes the US\$ 323 million WFP project in the food security and livelihoods sector. Given that the majority of projects only have a component of preparedness, the percentage dedicated to emergency preparedness in reality is significantly lower.

Understanding the level of emergency preparedness funding is challenging because participating organisations do not separate preparedness components of their work in any of the data tables for the Work Plan.

### United Nations Development Assistance Framework

The 2013–2016 United Nations Development Assistance Framework, with a budget of US\$ 877 million, compliments the strategic objectives of the Work Plan. It states that:

*“achieving a smooth transition to recovery and long-term development, while continuing to practice responsible humanitarianism, represents the cornerstone for the UNDAF.”*

The UNDAF has the following four pillars:

- Poverty Reduction, Inclusive Growth and Sustainable Livelihoods.
- Basic Services.
- Governance and Rule of Law.
- Social Cohesion, Peace Consolidation and Peace Dividends.

Cross cutting issues include protection, gender, environment and climate change, emergency preparedness and disaster risk reduction, and HIV/AIDS.

A specific outcome of the UNDAF is:

*“populations vulnerable to environmental risks and climate change become more resilient, and relevant institutions are more effective in the sustainable management of natural resources” (UNDAF Outcome 2 pillar 1).*

Nine UN agencies<sup>10</sup> are contributing to this outcome, with an estimated budget of US\$ 34.7 million (equating to 4% of the UNDAF budget), with activities that include:

- disaster risk and loss assessment
- developing a National Adaptation Plan for Climate Change
- a National Disaster Risk Management Strategy that embraces climate change adaptation
- a National All Hazard Emergency Preparedness Programme to promote compliance with international agreements and frameworks on disaster preparedness.
- technical assistance to establish a national coordination mechanism/platform for disaster risk reduction and climate change adaptation
- training on disaster risk management, including for flood and drought mitigation and health risk in disasters, aimed at increasing response and mitigation capacities amongst government and communities.

<sup>9</sup> The project for strengthening national health system emergency preparedness and response capacity and its transition towards early recovery received 89% of the funds requested

<sup>10</sup> FAO, IFAD, ILO, UNDP, UNEP, UNFPA, UNHABITAT, UNIDO and WHO.

The extent to which the UNDAF is able to complement the emergency preparedness, disaster risk management and disaster risk reduction objectives of the Work Plan, will in large part be determined by the ability to attract development funds, as well as the effectiveness of activities that are implemented.

### Multi Donor Trust Fund

The Sudan Multi Donor Trust Fund (MDTF) was created in 2005 to support the implementation of various aspects of the CPA and rebuild conflict-affected areas.<sup>11</sup> Approximately US\$ 265 million has been committed to the World Bank administered fund since 2005,<sup>12</sup> and the MDTF will close at the end of 2014. No projects specific to emergency preparedness were identified, which is not surprising given its focus. Future allocations to Sudan will be from regular trust funds and may include assistance to education (US\$ 76.5 million), environment (Global Environment Facility, GEF), and state peace building.

### Darfur Community Peace and Stabilisation Fund

The UNDP administered Darfur Community Peace and Stabilisation Fund (DCPSF) was established in 2007 to promote peace-building and reconciliation in Darfur by implementing community-based recovery and development activities. The focus of this fund is to support peace building at the local level, expand basic social service delivery, enhance communities' livelihoods, and improve governance and the rule of law. Whilst the objectives contribute to emergency preparedness, we found no specific references to emergency preparedness.

### Darfur Joint Assessment Mission

The second Darfur Joint Assessment Mission began in September 2012 and concluded in December 2012.<sup>13</sup> However, it was not possible during the research to obtain documents from the mission, and thus ascertain their relevance to emergency preparedness.

### Government contributions

This study was unable to access the 2013 national budget. From discussions with individual government ministries and the Ministry of Finance, it was clear that funds for preparedness are very limited and often not available. Rather, government departments tend to focus on emergency response through an emergency contingency budget held by the Ministry of Finance. The MoH sought US\$ 3.7 million for preparedness work in 2012, of which

civil defence provided US\$ 680,000 for purchasing equipment. The MoA indicated that it did not manage to secure any preparedness funds in 2012.

### Donor engagement

With the exception of the Government of Japan, all donors consulted during the field visit limited their assistance to humanitarian funding. There was no indication that any changes in this position were anticipated. An Interim Poverty Reduction Strategy Paper has been completed, but no timeframe of process has been established leading to a final Poverty Reduction Strategy Paper.

Whilst the ECHO Humanitarian Implementation Plan (HIP) for Sudan includes a disaster preparedness component, the environment for preparedness is not considered conducive, and there are no current or planned emergency preparedness projects. As an indication of this, until 2012 IFRC were receiving funds for disaster preparedness in Darfur. The project however came to an early close largely due to instability and the lack of state structures in which the project could be vested. Funds were moved to Blue Nile and South Kordofan, and when conflict returned to these areas, the project then focused on the east. These issues of instability highlight the practical challenges to supporting preparedness.

It is difficult to determine the proportion of the ECHO 2011 funds (totalling Euro 140 million for Sudan and South Sudan) that were allocated to emergency preparedness as there are no corresponding projects or budget lines. Some individual projects, such as the Euro 1.23 million Practical Action project in Eastern Sudan, include objectives to increase resilience to natural or man-made disasters, but there is no indication of the resources dedicated to this component.

USAID and Department of State assistance to Sudan in 2013 was US\$ 297 million, with the USAID/OFDA assistance being US\$ 7.6 million. Globally OFDA has a DRR component to which it allocates 15% of funds, but this is not being taken forward in Sudan due to the US sanctions. Of the OFDA contribution of US\$ 7.6 million, 30% is targeted to agriculture and food security, and 28% to logistics, support and relief commodities.

DFID's 2013 country assistance plan will continue to assist recovery in Sudan, balancing support to humanitarian assistance, recovery and resilience. Of note is the reduction of 30% in the DFID contribution to the CHF and the anticipated increased focus on resilience. This may provide entry points for support to emergency preparedness measures.

JICA has committed development funds to Sudan in the order of US\$ 20 million per year for technical assistance

<sup>11</sup> <http://www.mdtnf.org/>

<sup>12</sup> [http://www.mdtnf.org/documents/EXT/MDTF-N\\_factsheet.pdf](http://www.mdtnf.org/documents/EXT/MDTF-N_factsheet.pdf)

<sup>13</sup> The first was completed in 2006 but was not able to be operationalized.

and US\$ 30 million per year for grants. These include equipment and facilities to Sudan to build the capacity of state governments. Projects through FAO in Blue Nile and South Kordofan have included preparedness activities.

Sudan is a recipient of funds from Arab state donors (e.g. UAE and Qatar) and Turkey. While it is difficult to accurately gauge funding levels from these donors, the Global Humanitarian Assistance 2013 report found that Gulf State donors provided Sudan with US\$ 249 million in humanitarian aid between 2003 and 2012. Sudan was the third largest recipient of humanitarian aid from these donors, behind Pakistan and the West Bank/Gaza Strip (Global Humanitarian Assistance, 2013).

IFRC provides funds to the Sudanese Red Crescent from the Disaster Relief Emergency Fund (DREF). This is a rapid response fund with decisions on funding made within seven days. Given the nature of the funds, where preparedness components are included, they are on the back of the response, and used to build preparedness for the next crisis.

### Summary: financing for emergency preparedness

The analysis shows that the prime source of funding for emergency preparedness is through the humanitarian Work Plan. There are provisions for emergency preparedness, disaster risk management and disaster risk reduction in the UN Development Assistance Framework, but it is too early to judge the extent to which the development framework will be resourced. In general donors are not committing development funds to Sudan. In support of the Work Plan, the CHF provides allocations for pre-positioning stocks, with other activities for emergency preparedness usually included as a component of humanitarian response projects. Overall, a relatively small proportion of Work Plan resources, perhaps in the order of 3%, is dedicated to emergency preparedness. There is no requirement or incentive for organisations to dedicate proposals to emergency preparedness or to disaggregate activities and budget lines for emergency preparedness. This makes it challenging to track emergency preparedness activities and financing.

A key question is: what proportion of funds should be dedicated to emergency preparedness?

Several examples cited in this case study provide some indication of the financing needed. In the health sector, the funds committed to developing a National Health Preparedness Plan and putting in place capacity and contingency stocks, are clearly in excess of the US\$ 15 million requested in 2012. In terms of proportions of budgets, the 2012 WHO Early Recovery Strategy for Darfur used US\$ 13.8 million of which they estimate

US\$ 3.7 million (27%) was for specific preparedness activities. A parallel example within the UNDAF is the US\$ 2.3 million that UNDP are seeking for a three-year National Disaster Risk Management Programme.

## Barriers to emergency preparedness

This section reflects on gaps and challenges that need to be overcome if emergency preparedness activities and plans are to be consolidated and scaled up.

A wide range of activities are being undertaken that span the emergency preparedness categories set out in the inception report. However, there is no single preparedness focal point within government, the UN system or donors to consolidate and coordinate these activities. This gap is most pronounced for early warning. Several organisations (FAO, WFP, WHO, UNDP and OCHA) work on early warning information, and often this information starts with a multi-hazard assessment. Such efforts build capacity, particularly at the state level. Their consolidation would reduce the potential duplication of efforts and allow for more strategic dissemination and use of information.

Emergency preparedness activities are primarily undertaken by individual organisations. They are not based on consolidated plans for emergency preparedness at a federal, state or sector level. The exceptions to this are in the health sector where a national preparedness plan is being developed.

Emergency preparedness takes place largely within a humanitarian budget setting. For organisations working in Sudan this is pragmatic, reflecting the strong humanitarian focus of assistance, continued humanitarian needs and the availability of large amounts of financing through humanitarian channels. However, this also brings challenges and limitations, with organisations trying to incorporate longer-term preparedness activities such as capacity building and early warning into one year funding cycles.

The dominant humanitarian focus, and lack of opportunities to finance preparedness activities from development budgets, means that emergency preparedness activities lack visibility. There are few incentives for projects to highlight emergency preparedness; rather related activities tend to be incorporated as part of wider response projects. Identifying donors supportive of financing emergency preparedness activities, who can provide the incentives for having dedicated preparedness budget lines and dedicated preparedness projects, would be a very positive step for increasing the funding of preparedness.

This lack of visibility is in turn part of the decision making process between preparedness and humanitarian

response. The many years of delivering humanitarian assistance in a fragile state has left its legacy in terms of the operational environment. For many, the small gains are achievements in themselves, and several interlocutors questioned the degree to which investments in consolidated preparedness plans would be justified.

However, the organisations consulted all expressed the need to move from the dominant humanitarian focus to a paradigm of recovery. In this scenario emergency preparedness has a clear role to play, and one that compliments early recovery, disaster risk reduction and resilience. In this transition emergency preparedness can be used to work more closely with government and local actors, including through building their capacity. Doing so will require an understanding of the technical, financial and communication capacity of partners.

## Conclusions

### Concluding summary

This country case study set out to understand the crises for which emergency preparedness is needed, to understand the policies, strategies, and programmes that deal with these crises, the funding available for emergency preparedness, and how the work is coordinated. In summary:

#### What are we preparing for?

- Sudan faces diverse crises. Since 2011 this has included floods affecting 270,000 people, a yellow fever outbreak in Darfur that caused 171 deaths and led to a vaccination campaign for 3.5 million people, an on-going infestation of desert locusts, renewed conflict in Blue Nile and South Kordofan, and conflict linked to gold mining in Darfur. Overlaying all of these is a challenging macro-economic environment in which inflation runs at over 40% per year.
- A longer perspective on crises adds weight to the conclusion that the cycle of crises in Sudan will continue, and in turn adds weight to the need for emergency preparedness.

#### What policies, strategies and programmes are available to deal with these events?

- One of the most comprehensive examples of emergency preparedness was the inter-agency contingency planning undertaken for the 2011 referendum. Further contingency plans are now being developed for the Abyei referendum and for all Sudan.
- The preparation of a National Preparedness Plan in the Health Sector, as well as the preparedness and

response to desert locusts, provide good examples of sector-specific preparedness.

- There are a number of organisations – governmental and non-governmental, collecting and disseminating early warning information for the food and livelihoods sector. At present there is no fully operational focal point within the GoS for the information.
- Those organisations (Plan International, WFP, SRC, UNDP DRM) that have a particular focus on preparedness are doing so as part of an alignment with global HQ strategies.
- Whilst preparedness is predominantly about preparing for natural hazards, there is an interest in working further on the interface between natural hazards and local conflict, an interest expressed by all actors.
- Linking the humanitarian and development work of the UN, there is provision in the UNDAF (2013–2016) for a National All Hazard Emergency Preparedness Programme, as well as for support to a national coordination mechanism or platform for DRR and climate change adaptation.
- Despite the range of activities, there are considerable gaps in emergency preparedness. There have been insufficient incentives to invest in consolidated preparedness plans, based on an agreed assessment of risks derived from an analysis of natural and conflict-related hazards, of vulnerability and of capacity.

#### How are emergency preparedness activities funded?

- The humanitarian Work Plan is the main framework for emergency preparedness funding in Sudan, with the CHF providing the framework for pre-placing stocks as part of contingency planning.
- Emergency preparedness activities in the overall humanitarian Work Plan are less visible, with activities primarily funded as components within a response project.
- The largest contribution to emergency preparedness was the pre-positioning of stocks and provision of human resource capacity as part of the referendum contingency plan, which was finalised in October 2010. The proposal, developed separately to the humanitarian Work Plan, was fully funded at US\$ 44 million.
- For the 2012 Work Plan US\$ 16.4 million was received for emergency preparedness. Although substantive in monetary terms, it is more modest in relation to the scale of the Work Plan, equating to around 3% of the

total. Of the US\$ 16.4 million for the seven projects requesting emergency preparedness funds a single health project<sup>14</sup> accounts for US\$ 15 million, lending further weight to the sense that investment in emergency preparedness is low.

- There are insufficient incentives for organisations to dedicate budget lines to preparedness activities in the Work Plan. If anything the converse applies, with incentives to quietly achieve preparedness work within the visibility of a response programme.
- Disaggregating the amount of funds dedicated to the emergency preparedness component with any degree of confidence is therefore challenging.
- In terms of trying to understand what emergency preparedness costs, one example is the WHO emergency programme in Sudan for 2012. This had a budget of US\$ 13.8 million. WHO analysed the programme in relation to the objectives of this study and estimated that the preparedness components represented US\$ 3.76 million, or 27% of the budget.
- Outside the humanitarian Work Plan opportunities to finance emergency preparedness are very limited – no examples were located of donors providing emergency preparedness resources through a development budget.

#### How is the work coordinated?

- There are active humanitarian coordination systems in Sudan, including regular meetings between GoS and the international community, the humanitarian country team, and supporting sectors.
- There are active links between national and regional/international organisations in emergency preparedness, with those cited as particularly strong being related to meteorology, climate change, livestock disease, and food security.
- Five participants from GoS will attend the 1st Arab States Platform for Disaster Risk Reduction in March 2014, and the UNDAF provides support for establishing a national coordination mechanism related to the Hyogo Framework of Action.
- There is no single focal point in government or the international community for emergency preparedness, and emergency preparedness is not a dedicated element within the coordination structures.

## Recommendations

1. The frequency and impact of crises in Sudan, caused by natural hazards, conflict, and the interface between the two, demonstrates the need for emergency preparedness.
2. Contingency planning, including the pre-placement of response stocks, has been demonstrated as effective. Future contingency planning in Abyei and the rest of Sudan merits support.
3. There are areas, both geographic and thematic, in which preparedness activities that go beyond contingency planning can be considered. This may be an opportune time to consider this given the interest from GoS and international partners on transition, the focus on Sudanisation, and the reality of diminishing humanitarian budgets.
4. Areas of focus could include Kassala, the transition in Darfur and the issue of land degradation and potential local conflict as pastoralist migratory routes are challenged.
5. In these, as in other areas, emergency preparedness is an essential part of early recovery, disaster risk reduction and resilience.
6. A more consolidated focus on emergency preparedness would benefit from a specific focal point in the UN system and in government (both federal and state level). The rationale for this is to ensure that information and communication is complimentary, and that there is no duplication of effort.
7. A focus on a single state could be combined with better tracking and analysis of the funds and activities dedicated to emergency preparedness.
8. Identifying a donor or donors who are prepared to support emergency preparedness will be essential, providing the incentive for organisations to make preparedness activities more visible, including dedicated projects and budget lines, and the associated monitoring and evaluation frameworks.
9. The time frame for support to emergency preparedness needs to be considered. Whilst the pre-placement of stocks is feasible within a 12-month funding window, other elements of emergency preparedness will need a longer perspective, with minimum timeframes of 3–5 years.

<sup>14</sup> The project for strengthening national health system emergency preparedness and response capacity and its transition towards early recovery received 89% of funds requested.

## Case study methodology

The country case study incorporated a field visit to Khartoum between 24 February and 6 March 2013. It was supported by a desk study by an ODI research assistant. The visit to Khartoum was structured around meetings with government, the international community and civil society (see Annex 1 schedule of meetings). In advance of the meetings a note was circulated (Annex 2) setting out the range of questions to be covered as well as the definition and categories of emergency preparedness defined in the inception report. The overview of emergency preparedness activities and plans was derived from discussions in Khartoum and supplemented a review of other relevant initiatives and actions, which are summarised in Annex 4.

The case study was led by Tom Hockley (as a consultant to ODI), and supported by Daniel Longhurst (FAO). We were very grateful for the time allotted to discussions, particularly given the intense working environment of a humanitarian programme. We are grateful to OCHA – in particular Natthinee Rodraska and Peter Krakolinig, for their organisation of the visit, and to Eva Coombe, research assistant at ODI, for her substantive work leading up to the visit.

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## Annex 1. Schedule of meetings

Date & Time	Programme	Venue
<b>Day 1: Sunday 24 February</b>		
Evening	Arrival in Khartoum	
<b>Day 2: Monday 25 February</b>		
8:30 – 9:15	Meeting with the UN Resident/Humanitarian Coordinator Ali Al-Za'tari, RC/HC	UNCSO at UNDP Compound
9:15 – 10:30	Meeting with UNDP and UNDP Crisis and Recovery Mapping and Analysis (CRMA) Pontus Ohrstedt, Team Leader, Crisis Prevention and Recovery Unit Shama Meki, Senior Programme Officer, Crisis Prevention and Recovery, Environment Team CRMA team	UNDP Office
11:00 – 12:00	Meeting with OCHA Communication and Information Management Section (Chair of the Information Management Working Group) Christophe Illemassene, Head of Communication and Information Management Section Eva Vognild, Data Coordinator Damian Rance, Public Information Officer Tamreez Amirzada, Head of Visuals	OCHA Office
12:00 – 14:00	Lunch	
14:00 – 15:00	Meeting with OCHA Head of Operations Peter Krakolinig, Head of Operations	OCHA Office
15:00 – 15:45	Meeting with OCHA Head of Office Mark Cutts, Head of Office	OCHA Office
16:00 – 17:30	Meeting with OCHA Head of Humanitarian Financing Alta Haggarty, Head of Humanitarian Financing Section	OCHA Office
<b>Day 3: Tuesday 26 February</b>		
8:00 – 9:00	FAO Charles Agobia, Acting Representative Sabine Schenk, Senior Emergency and Rehabilitation Coordinator Jimmy Owani, Head of Emergency Programme Office	FAO Office
9:30 – 11:00	Meeting with HAC Ali Adam, Director of NGOs and Head of Joint Procedures Centre Mohamed Anwar, Executive Director of Commission office and Representative of Emergency Section	HAC Office
11:15 – 12:30	WHO Dr Jamshed Tanoli, Health Cluster Coordinator Dr Iman Shakiti, Emergency Coordinator Dr Nageeb H. Ibrahim, Health Cluster Focal Point	WHO Office
13:00 – 14:00	Ministry of Livestock, Fishery and Rangeland H.E. Dr Faisal Hassan Ibrahim, Minister of Livestock, Fishery and Rangeland Dr Kamal Tagelsir El Sheikh, Undersecretary Dr Amar Sheikh Idris, General Director for Planning and Animal Resources Economy Directorate	MoLFR Office
14:00 – 14:30	Quick lunch	
14:30 – 15:30	Ministry of Health Dr Sumaya Okod, Director of Emergency and Humanitarian Action Section	MoH Office
16:00 – 17:30	UNDP CRMA	UNDP CRMA Office

Date & Time	Programme	Venue
<b>Day 4: Wednesday 27 February</b>		
9:00 – 10:00	ECHO Yassine Gaba	ECHO Office
10:30 – 12:00	Meeting with 4 national NGOs (CHF 2012 recipients) Nazar Mahmoud, General Director, Mubadiroon Organization Yaseen Abdul Rahman, Mobadiroon Organization Sahar Osman, Alsalaam Organization for Rehabilitation and Development (AORD) Hajer Omer, Alsalaam Organization for Rehabilitation and Development (AORD) Mubarak Asdalla, General Director, Nuba Mountains Association for International Development (NMAID) Saif Elnasr Hussein, General Director, Humanitarian Aid and Development (HAD)	OCHA Office
12:00 – 13:00	Lunch	
13:00 – 14:00	Ministry of Agriculture Mr. Idris Ahmed Mohamed, Deputy General Director for International Cooperation and Investment Directorate Dr Adel Osman Idris, General Director for Strategic Partnerships Directorate Ikhlas Mohamed Ali, General Director for Regional and International organizations Directorate Mansour Fateh El Rahman, General Director for Investment Directorate	MoA Office
14:30 – 16:00	Ministry of Finance Omer Hagam, General Director for International Cooperation Ikhlas Mohamed Ali, General Director for UN Agencies Directorate Sawsan Ali Hussein, Program Officer, UN Agencies Directorate	MoF Office
16:15 onwards	Meeting with two UNDP Economists	UNDP
<b>Day 5: Thursday 28 February</b>		
8:30 – 10:00	WFP Marie-Helene KYPRIANOU, Darfur Coordinator Mr Hazem Almahdy, Head of VAM	WFP Office
10:30 – 11:30	UNHCR Francois Reybet Degat, Deputy Representative	UNHCR Office
12:00 – 13:30	INGO Forum Steering Committee Ruairi McDermott, Country Director, Mercy Corps-Scotland, Chair of the INGO Forum Steering Committee Manoj Kumar, Country Director, Plan International, Vice-Chair of the INGO Forum Steering Committee	OCHA Office (small meeting room on 3rd floor)
13:30 – 14:30	Lunch	
14:45 – 16:00	High Council for Civil Defence Name: TBC	HCCD Office
16:30 – 17:30	USAID/OFDA Saad El-Din Hussein Hassan, USAID/Office of U.S. Foreign Disaster Assistance	OFDA Office (US Embassy Compound)
<b>Day 6: Friday 1 March (Day-off)</b>		
Weekend		
<b>Day 7: Saturday 2 March (Day-off)</b>		
Weekend		

Date & Time	Programme	Venue
<b>Day 8: Sunday 3 March</b>		
9:00 – 10:30	Sudanese Red Crescent Society (SRCS) Rahama Mohamed Ibrahim, Head of Disaster Management Section	SRCS Compound
10:30 – 11:30	IFRC Aisha Maulana, Country Representative	SRCS Compound
11:30 – 14:00	Lunch	
14:30 – 16:00	Ministry of Environment, Forests and Physical Development Dr Babiker Abdalla Ibrahim, Undersecretary Dr Amani Mohamed Ahmed, International Cooperation and Disaster Risk Reduction Focal Point Dr Mubarak Khalid General Directorate for Environment Ambassador. Mohamed Yousif, General Director for Environment Directorate, Ministry of Foreign Affairs	MoE Office
16:30 – 17:30	UNEP Robyn Bovey, Senior Advisor Brendan Bromwich, Programme Coordinator Julia Ismar, Post-Conflict and Disaster Management Branch	UNEP Office
<b>Day 9: Monday 4 March</b>		
8:30 – 9:30	JICA MR Hiroyuki Mori, Country Representative	JICA Office (House 54, Block 80, Al-Riyad, Khartoum)
10:00 – 11:30	Sudan Council for Voluntary Agencies (SCOVA) Ibrahim Mohammad, Secretary-General Omer Osman, Consultant Dr Fatih El Rehman El Gadi, Consultant and Director for International Relation Hassan Mater, Consultant Hamed, consultant Dr Elgemiabby M. Mohamed, Consultant and President of Ana Assudan Organization	SCOVA Office
11:30 – 13:30	Lunch	
14:00 – 14:30	World Bank Isabel Soares, Senior Operations Officer	World Bank Office
14:45 – 15:45	International Committee of the Red Cross (ICRC) Benjamin Wahren, Deputy Head of Delegation	ICRC Office
16:45 – 17:30	IOM	IOM Office
<b>Day 10: Tuesday 5 March</b>		
8:00 – 9:30	UNICEF Ray Virgilio Torres, Deputy Representative	UNICEF Office
12:00 – 13:00	DFID Heidi Gilbert, Humanitarian Advisor	DFID Office
13:00 – 14:00	Lunch	
14:15 – 16:00	Debriefing with all stakeholders	WFP
<b>Day 11: Wednesday 6 March</b>		
Early morning	Departure from Khartoum	

## Annex 2. Preparedness matrix: categories of emergency preparedness

### Preparedness Matrix: Categories of Emergency Preparedness

Hazard/risk analysis and early warning	<ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard/risk analysis</li> </ul>
Institutional and legislative frameworks	<ul style="list-style-type: none"> <li>• Institutional and Legislative Frameworks, Resource Allocation and Funding Mechanisms</li> <li>• National plan of action, national platform, national disaster management authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>
Resource allocation and funding	<ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency program budgets (internal)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>• Government coordination mechanisms</li> <li>• National and sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster/sector established contextual standards</li> </ul>
Information management and communication	<ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster/sector information management systems – GIS, 3/4Ws</li> </ul>
Contingency/preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness</li> <li>• Contingency/preparedness and response planning</li> </ul>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and/or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>
Emergency services/standby arrangements and prepositioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>

## Annex 3. Hazards in Sudan since 2005

Year	Type of hazard	Description	Location	Population affected
2013	Desert locusts	Trans-boundary infestation	East	
2013	Conflict	Sparked by increase in gold mining	Jebel Amir gold mining area in North Darfur.	Northern Reizegat (Aballa) and Beni Hussein tribes
2012–2013	Yellow fever outbreak		Out of 64 localities in Darfur, 35 localities are affected.	As of 6 January 2013, the total number of suspected cases has reached 849, including 171 deaths
2012 third quarter	Conflict	Fighting between the Sudanese Armed Forces (SAF) and Sudan People's Liberation Movement-North (SPLM-N) forces	South Kordofan and Blue Nile	Over 211,000 Sudanese refugees in camps in South Sudan and Ethiopia.
2012 third quarter	Floods	Flash floods caused by heavy rains.	Kassala, South Darfur, Gedaref and Sennar	An estimated 240,000 people have been affected, between June and early September with 68 people killed and 56 injured. 35,000 head of livestock died, mainly in Darfur.
2012 third quarter	Conflict	Violence associated with the assassination of the Al Waha nomadic community commissioner.	Kutum, Darfur, particularly in North Darfur State	Civilian displacement. 25,000 people in Kassab camp fled to Kutum town where they sheltered with the host community.
2012 second quarter	Conflict and food insecurity	Fighting between the SAF and SPLM-N	South Kordofan and Blue Nile states	665,000 people either displaced or severely affected by the fighting in South Kordofan and Blue Nile. Famine Early Warning Systems Network reported that as of June 2012, 200,000 to 250,000 people in areas held by SPLM-N in South Kordofan were facing 'crisis' to 'emergency' levels of food insecurity.
2012 second quarter	Food insecurity	Rising food prices and a poor harvest.	Darfur	By the end of April, Zamzam camp near El Fasher in north Darfur had received 3,400 newly displaced people from Alauna, Abu Delek and Sag El Naam villages in Dar Es Salaam and Kalimindo localities.
2012 first quarter	Conflict	Fighting between the SAF and the SPLM-N	South Kordofan and Blue Nile	Tens of thousands of people were internally displaced and the number of refugees in Ethiopia and South Sudan rose from an estimated 109,000 to some 130,000 during the first quarter of 2012
2011 third quarter	Fighting	The fighting in South Kordofan between the Sudan Armed Forces (SAF) and SPLM-N combatants, which started on 5 June 2011, continued throughout the third quarter of 2011	The fighting affected 11 of 19 localities in South Kordofan	200,000 Internally displaced or severely affected by conflict
2011 third quarter	Conflict	On 1 September 2011, heavy fighting broke out between the SAF and the SPLM-N in the capital of Blue Nile State, Ed Damazine.	Blue Nile State	Early in the conflict, over 100,000 people were reported to have been displaced from Ed Damazine town with reports of property destruction and looting of houses. According to UNHCR, by 27 September, an estimated 25,000 refugees from Blue Nile State had fled to Ethiopia. Additionally, UNHCR estimated that 4,000 people from Blue Nile State had arrived in Upper Nile State in South Sudan.
2011 third quarter	Conflict	Conflict between SAF and the Sudan People's Liberation Army (SPLA) in Abyei.	Abyei	110,000 people fled south to Agok (on the southern perimeter of the Abyei Administrative Area) and also into South Sudan.

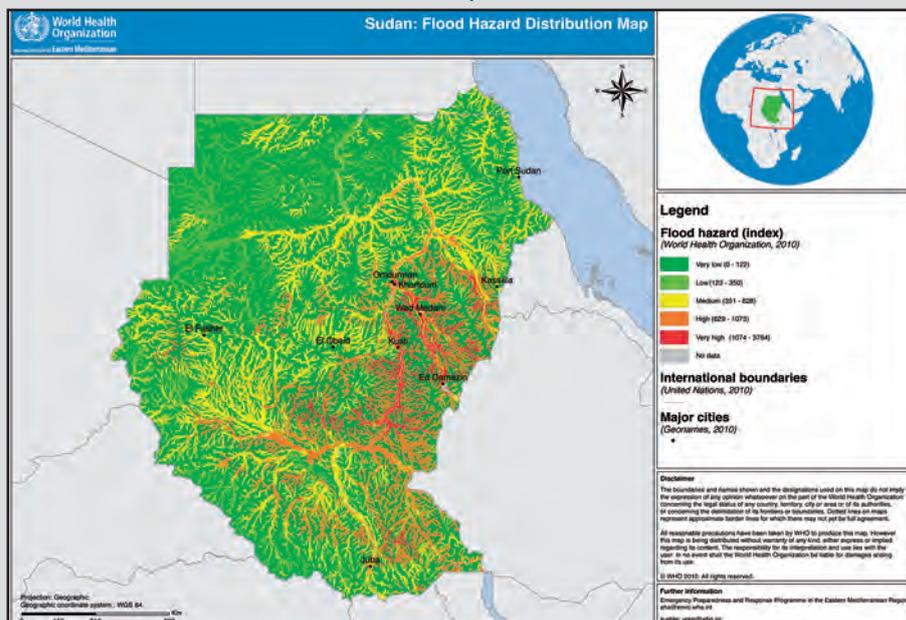
Year	Type of hazard	Description	Location	Population affected
2011 third quarter	Dry spells and flooding	An extended dry spell in North Darfur during July 2011 caused delays to planting activities and increased expectations of a poor winter harvest season. The continued dry spell has led to a concentration of livestock in the areas of North Darfur that still have good grazing land, increasing the likelihood of livestock disease outbreak and death of livestock due to lack of water and pasture. Meanwhile, heavy rains in some places in August and early September led to flooding in Dar El Salam locality	Darfur, North Darfur, Dar Es Salam locality	In South Darfur, a reported 3,475 people were displaced to higher grounds following the flooding of the Bulbul River in early August.
2011 second quarter	Conflict		Abyei	An estimated 110,000 people displaced from Abyei to southern Sudan.
2011 second quarter	Conflict		South Kordofan	73,000 people displaced in South Kordofan (June–July 2011). 48,000 people received food aid in South Kordofan by 30 June
2011 second quarter	Meningitis and measles outbreaks	Between January and June 2011, the total number of suspected measles cases reported from the three states of Darfur reached 674.	Darfur, Al Radom in South Darfur	Al Radom in South Darfur was the only sector which reached epidemic threshold with 73 suspected meningitis cases.
2011 July–Dec	Drought	Below-average rainfall across east, central, and west Sudan	Areas of Darfur, North Kordofan, Red Sea, Blue Nile, White Nile and Kassala states	About 1.7 million people in drought affected areas of Darfur, parts of North Kordofan, Red Sea, Blue Nile, White Nile and Kassala states are 'stressed' (IPC Phase 2).
2011 fourth quarter	Conflict	Sustained heavy fighting between the SAF and SPLM-N in South Kordofan and Blue Nile States	South Kordofan and Blue Nile	Over 366,000 people have been internally displaced or severely affected and 109,000 refugees have fled to South Sudan and Ethiopia
2011 fourth quarter	Food insecurity		Sudan	The USAID-funded Famine Early Warning Systems Network (FEWS NET) reported in its Sudan Food Security Outlook Update for November 2011 that approximately 3.2 million people in Sudan were estimated to be food insecure.
2011 fourth quarter	Outbreak of diphtheria	On 8 December 2011, the State Ministry of Health (SMoH) in North Darfur confirmed an outbreak of diphtheria.	Al Lait and El Tawisha localities in Darfur	Out of the 4,884 suspected cases reported, 484 cases have been clinically confirmed
2011 first quarter	Conflict	The withdrawal in December 2010 of the Sudan Liberation Army – Minni Minnawi Faction (SLA-MM) from the peace agreement, which it had signed with the Government in 2006, led to a new upsurge of fighting in Darfur.	In Zamzam, Abu Zerega, Tawila, Shangil Tobaya and other parts of Darfur	Clashes between government forces and armed movements, including the SLA-MM, in Darfur continued during the first quarter resulting in large-scale civilian displacement.
2010 third quarter	Flood			300,000 beneficiaries targeted in six flood-affected states

Year	Type of hazard	Description	Location	Population affected
2010 fourth quarter	Conflict	Clashes between the government and the Sudan Liberation Army (Abdul Wahid Faction, SLa-aW) continued sporadically	Darfur eastern Jebel Marra	Displacement of up to 40,000 people
2010 fourth quarter	violent clashes with Sla-mm	In December, the only signatory of the 2006 Darfur Peace agreement, the Sudan Liberation army (minni minnawi Faction, SLa-mm), clashed with government forces	Darfur near Khor Abache	By the end of December, estimates projected that the fighting had displaced around 40,000 people.
2010 fourth quarter	Renewed fighting	On 3 November a convoy travelling from Ed Daien to Nyala – which included 99 trucks carrying WFP food supplies – came under attack from JEm forces	North Darfur	The deaths of 37 policemen who were escorting the convoy and 15 injured.
2005 July–August	Flooding	Heavy rainfall resulted in flash floods	North Darfur and Khartoum. Red Sea and River Nile states	956 families left homeless after their houses were destroyed by floods in Khartoum North. Flooding was also reported in Elfashir, North Darfur State on 3 August 2005, where houses were destroyed, 2,093 families were reportedly displaced and eight people killed.  In Port Sudan (Red Sea State), five people were killed and 2,950 houses partially or totally destroyed by the heavy floods. 70 electricity poles collapsed in the city centre, resulting in power disruptions.
2009	Complex emergency	In Darfur, conflict among armed opposition factions, the Sudanese Armed Forces, militias, and ethnic groups remained on-going throughout 2009	Darfur	Between January and mid-May 2009, violence newly displaced approximately 137,000 individuals in Darfur
2009	Floods	Between August 23 and 29, 2009, heavy rains resulted in widespread flooding	Khartoum State	22,000 households affected.
2008	Conflict		Darfur	315,000 people displaced within Darfur and to eastern Chad in 2008, bringing the total IDP population to nearly 2.7 million individuals.
2007	Floods	Torrential rains in Sudan since the beginning of July 2007 caused the Nile River and other seasonal rivers to overflow, resulting in extensive flooding in eight States of the country	States of Kassala, Khartoum and Northern Kordofan.	637 cases of suspected acute watery diarrhoea reported in the states of Gedaref and Kassala in the country's east, leading to 39 known deaths.
2007	Conflict		Darfur, Western region	More than 200,000 people newly displaced, bringing the total IDP population to 2.2 million. 4.2 million conflict-affected people in Sudan's western region.
2006	Conflict	Fighting among armed opposition factions, Sudanese armed forces, and militias persisted, displacing hundreds of thousands of civilians	Sudan, Darfur	Hundreds of thousands of civilians displaced. During FY 2006, the complex emergency in Darfur affected more than 3.8 million people, including 1.9 million IDPs and 220,000 refugees in eastern Chad.

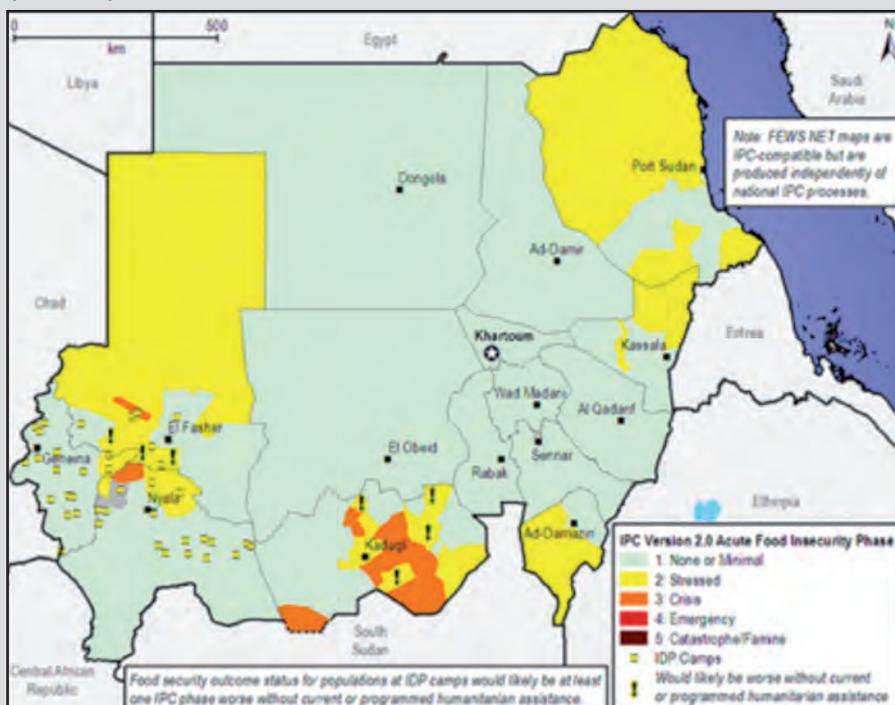
Year	Type of hazard	Description	Location	Population affected
2005	21 year long conflict	On January 9, 2005, the Government of Sudan and the Sudan People's Liberation Movement (SPLM) signed the Comprehensive Peace Agreement (CPA), officially ending Africa's longest running civil war.	Sudan	During the 21-year conflict, fighting, famine, and disease killed more than 2 million people, forced an estimated 600,000 people to seek refuge in neighbouring countries, and displaced 4 million people within Sudan – the largest IDP population in the world.
2005	Conflict	Fighting among the SLM/A, other armed opposition groups, government forces, and government-sponsored militias	Sudan, Darfur	2 million Darfurians fled their homes, including nearly 1.8 million IDPs and approximately 200,000 refugees in eastern Chad. More than 3 million people – an estimated 50% of Darfur's population, required humanitarian assistance in FY 2005

## Annex 4. Risk maps

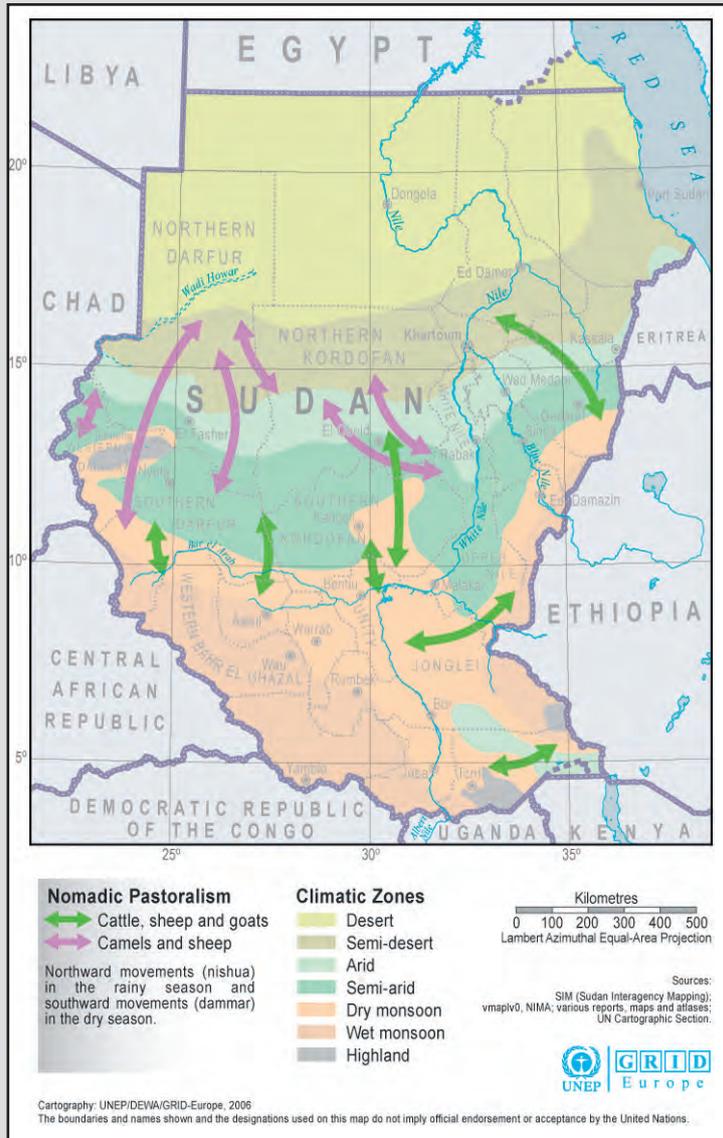
### WHO Sudan flood hazard distribution map



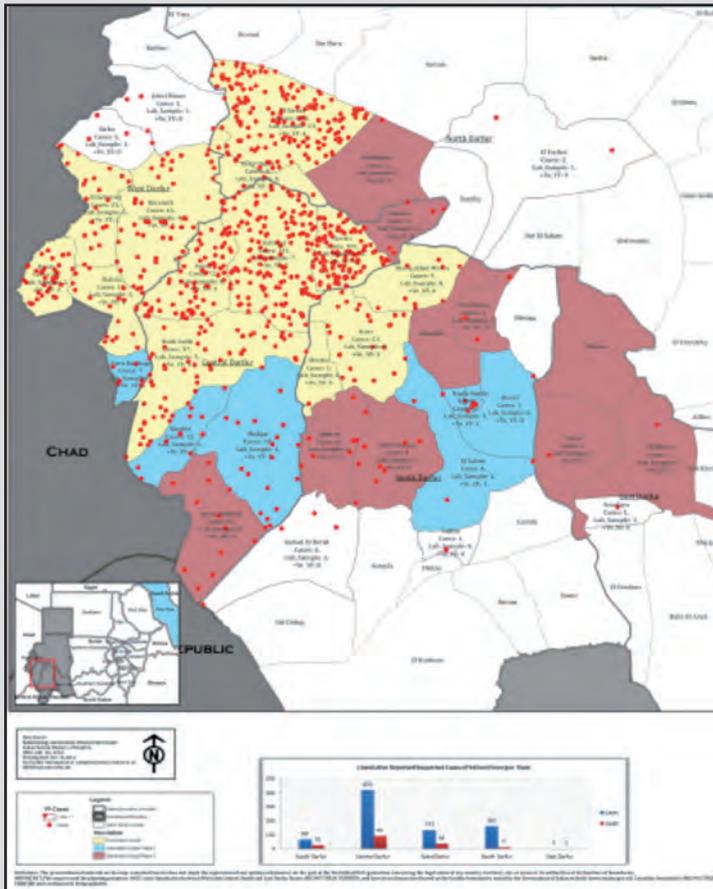
### Food Insecure Vulnerable Population in Sudan, 2012 (FEWSNET)



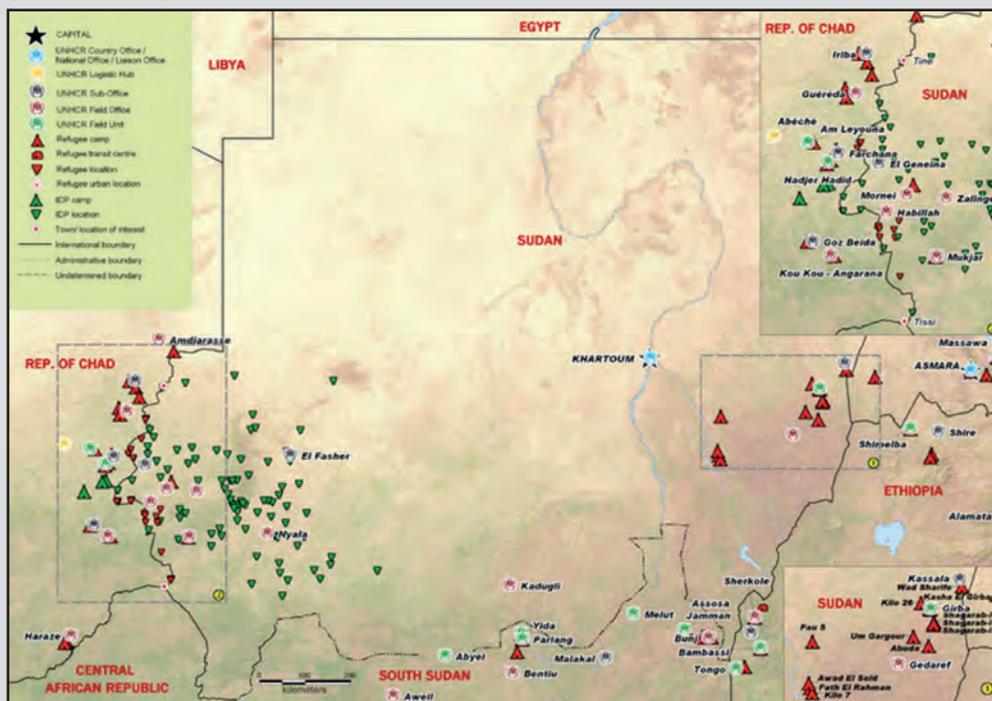
**Annual pastoral migration routes in Sudan**  
 (UNEP, GRID)



**Yellow fever outbreak in Darfur, 2012  
 (WHO)**



**Refugees and IDPs  
 (source: UNHCR)**



## Annex 5. Analysis of UN and partners work plan 2013

Agency	Project name	EP component description	Cost (US\$)
OCHA	Strengthening Humanitarian Coordination and Advocacy in Sudan	To strengthen the coordination of the humanitarian response and facilitate the implementation of principled humanitarian action. <b>Emergency preparedness and response:</b> support to the <b>development of national and local contingency plans</b>	11,177,228
IFRC/Sudanese Red Crescent	Enhancing Capacity Of Sudanese Red Crescent Society And Community Based Partners	<b>Build and strengthen capacity</b> of national actors to respond effectively and efficiently to existing and unforeseen humanitarian needs. To upgrade humanitarian/health services and <b>disaster risk reduction techniques</b> at community levels.	400,000
The Humanitarian Forum Sudan	Enhancing National NGOs Capacity to Coordinate, Plan, and Implement Humanitarian Aid Programmes	<b>Build capacity of national actors</b> to better respond to existing and unforeseen humanitarian needs.	395,000
CARE International	Strengthening Local Partners' Capacity	<b>Emergency Preparedness/Disaster Risk Reduction and early warning system</b>	580,000
Sudan Council Of Voluntary Agencies	Strengthening SCOVA Coordination Capacities	<b>Enhance capacities of national NGOs/CBOs</b> in order to provide effective and timely delivery of humanitarian assistance to conflict affected people.	100,000
REDr UK	Strengthening capacities of national actors to effectively address humanitarian needs.	Develop, organise and facilitate <b>trainings activities</b> such as <b>crisis management, disaster risk reduction</b>	150,000
HelpAge International	Improved Food and Livelihoods Security for Older Persons	Strengthen coordination of interventions and capacity of partners to <b>prepare and effectively respond</b> to food security and livelihoods issues in emergencies	552,020
Goal	Improving Food Security and Livelihoods Opportunities for the Most Vulnerable Populations in Kassala	Strengthen coordination of interventions and capacity of partners to <b>prepare and effectively respond</b> to food security and livelihoods emergencies	420,800
Vétérinaires Sans Frontières (Germany)	Emergency and early recovery support to IDPs, returnees, nomads, flood-/drought-affected and vulnerable resident communities in South Kordofan, West Darfur, Central Darfur and Red Sea states	Protect livelihoods through <b>strengthened capacities for emergency preparedness</b> and response to food security and livelihoods threats by building capacities of communities including women	1,500,000
Great Family Organization	Increase livelihood opportunities to returnees, IDPs, nomads and vulnerable rural populations for sustaining life in self-dependency and dignity in South Darfur, Central Darfur and East Darfur.	To <b>support and strengthen emergency preparedness</b> and effective coping mechanisms to food security and livelihood hazards	692,023
World Food Programme	Emergency Food Assistance to Internally Displaced Persons and Vulnerable Populations Affected by Conflict and Natural Disasters	<b>Enhance preparedness</b> against recurrent climate shocks	323,489,365
World Vision Sudan	Improved food security for South Darfur communities recovering from conflict and recurrent droughts	<b>Enhance preparedness</b> and resilience to shocks	1,930,000
Fellowship For African Relief	Growing Resilience and Improving Food Security in South Kordofan	Train and provide treatment kits to 50 community animal health workers (CAHWs) in <b>early detection, emergency preparedness</b> and response to natural animal disease outbreak.	660,190
Fellowship For African Relief	Restoring Livelihoods in Flood Affected States through food security and livelihood (FSL) Initiatives in White Nile State	<b>Disaster preparedness and risk management</b>	506,110
World Relief	WR Food Security and Livelihoods Project	Support capacity building for national and state line ministry staff, and local partners in <b>emergency preparedness and effective response</b> to food security and livelihoods hazards	961,772

Agency	Project name	EP component description	Cost (US\$)
CARE	Emergency Food Security and Livelihood Recovery Project in South Darfur and South Kordofan States	Collaborate closely with 5 local NGOs, and strengthen their capacity in <b>preparedness and response</b> to food security and livelihoods emergencies	1,974,172
FAO	Strengthening of coordination of food security and livelihoods sector interventions in disaster-affected areas in Sudan	To improve <b>preparedness, response</b> and coverage of needs of vulnerable households in disaster-affected areas in Sudan	1,200,000
SCG	Food Security and Livelihood Enhancement for Emergency and Recovery Support – West Darfur	Strengthen <b>coordination</b> of interventions and capacity of partners to <b>prepare and effectively respond</b> to food security and livelihoods emergencies	775,561
COOPI	Support to food security and livelihood strengthening the coping system of vulnerable communities in North Darfur	<b>Contingency plans</b> put into action. <b>Disaster preparedness activities</b> , such as storing of hay to prevent shortage and drought emergency should also be considered	1,248,000
ZOA	Sustainable livelihood recovery in Darfur and Gedaref.	Contribution to <b>sector and community-level preparedness</b> through <b>coordination and information sharing</b>	1,251,225
Fatma Alzhra For Welfare And Childhood Organization	Improvement of Food Security, Food mitigation and Enhancement of Livelihoods for Vulnerable Communities in 3 Darfurs	Provide <b>capacity building for emergency preparedness</b> and effective response to food security and livelihoods hazards	231,760
Catholic Relief Services	Early Recovery and Durable Solutions for Disaster and Conflict Affected Populations in Khartoum and Darfur	Training of 60 local community leaders in <b>flood emergency preparedness. Emergency preparedness committees</b> in Umbada, Jebel and Sharq neil will be formulated and have adequate emergency action plans in place	937,246
UNDP	Crisis and Recovery Mapping and Analysis in Darfur	Establishment of <b>local conflict management and early warning mechanisms</b>	1,979,500
UNDP	Reduction of resource-based conflicts for sustainable natural resources management and enhancing adaptive capacity to climate change impacts	Management Plans, Regulations and Land Use Plans for critical multiple-use, including areas developed and agreed, and linked to <b>early warning and contingency planning</b> and technical support services	2,000,000
AORD	Improve roads access to the vulnerable groups and local communities in Blue Nile state	Provide training for community labour and road committees in construction and maintenance of infrastructure and <b>preparedness and response</b> to emergency road access. Build <b>local capacity of preparedness and response</b>	490,000
Goal	Support the Provision of Quality and Sustainable Primary Health Care and Community Health Promotion Services to Vulnerable Communities in Sudan	Support Kutum and Alwaha LHDs in preparing <b>emergency preparedness plans</b> and prepositioning of response kits for known seasonal emergencies	1,900,000
Partner Aid International	Primary Health Care and Community Empowerment in North Darfur	Participate in the planning of outbreak <b>preparedness task force</b> and participate in outbreak response	1,376,112
Johanniter Unfallhilfe E.V	Support of Primary Health Care Services for the Population of Remote Localities in South Darfur	Training: diagnosis and treatment, Health Promotion, referral strategies, <b>early warning systems and emergency preparedness. Training</b> of medical staff in the PHCU to improve reporting of data for outbreak control and <b>preparedness</b> and regular morbidity and mortality statistics	1,490,000
COSV	Provision of primary health care services in Kulbus Locality in West Darfur.	To reduce mortality and morbidity among a highly vulnerable population through the provision of integrated primary health care services and <b>strengthening national and local capacity in early detection, preparedness and response</b> to emergencies and public health threats	409,672

Agency	Project name	EP component description	Cost (US\$)
Relief International	Strengthening primary health care services for IDP, resident and nomad populations in conflict affected rural areas of North Darfur State	To strengthen the capacity of health staff from rural health facilities and rural communities in <b>preparedness and response</b> to common communicable diseases outbreaks	1,213,893
World Relief	Health Project in West Darfur	To contribute to strengthening the local capacity through <b>surveillance, preparedness, and emergency response; predict, prepare</b> for, respond to, mitigate and manage health risks that include communicable diseases and emergencies. Health staff strengthened in their capacity for <b>disaster risk reduction</b> , mass causality management, <b>emergency preparedness</b> , early detection and response	540,000
Human Relief Foundation	Support to health services in West Darfur	To strengthen national and local capacity in <b>early detection, preparedness and response</b> to emergencies and public health threats	445,640
World Health Organization	Support access to quality health services including communicable disease control and prevention	To strengthen national and local capacity in <b>early detection, preparedness and response</b> to emergencies and public health threats. Strengthen outbreak/ <b>emergency preparedness, early detection and response</b> capacity through training of rapid response teams and provide logistic support for verification missions	14,235,400
Save The Children	Basic and Emergency Health Services and Rehabilitation for conflict affected population – West Darfur, South Kordofan and Abyei	To strengthen national and local capacity in <b>early detection, preparedness and response</b> to emergencies and public health threats	7,178,391
United Nations Children's Fund	Improve access of vulnerable population to quality primary health care services	<b>Put appropriate emergency preparedness and response (EPR) interventions</b> in place in accordance to with policy road map	9,900,000
Sudanese Red Crescent	Emergency Health Support For South Kordofan and Blue Nile State	Developed and implemented <b>emergency preparedness and response plans</b> in BN and S.K states	5,565,600
United Nations Population Fund	Improved accessibility to and availability of quality Reproductive Health services for vulnerable population in targeted states in Sudan	Support coordination and developing of <b>Inter-agency contingency planning</b> focusing on Minimum Initial Services Package on reproductive health	4,118,561
Kuwaiti Patients Helping Fund	Provision and improvement of primary health care access and quality for vulnerable populations in North Darfur and South Darfur	Strengthen <b>preparedness and response</b> to outbreaks	815,100
World Food Programme	Logistics Coordination, Provision of Common Services, Information Management and GIS Mapping	To provide support and respond to the logistics needs of humanitarian actors involved in relief operations in Sudan; enhance <b>coordination, predictability</b> , timeliness and efficiency of the logistics response under the sector/cluster approach	641,521
Tearfund	Emergency Response for Conflict-affected Communities in Darfur	To facilitate coordination, <b>timely information sharing</b> and capacity building amongst all partners and stakeholders in the sector	262,842
Norwegian Church Aid	Supporting And Strengthening Community Emergency Preparedness and Response in South and Central Darfur	NCA will support the strengthening of <b>community based response mechanisms such as disaster reduction committees</b> and other community stakeholders through community capacity building	744,572
Goal	Preparedness and Emergency Response Including Transitional Shelter to Displaced Populations in Kutum/North Darfur.	Identify and address gaps and overlaps through effective coordination and timely information sharing between partners. Share <b>preparedness and assessment results</b> with the common pipeline and agree on response plan	195,000
Sudanese Red Crescent	Non-food items (NFIs and emergency shelter for disaster affected communities in Darfur	Awareness sessions conveying <b>disaster preparedness</b> messages. <b>Training</b> on disaster risk assessment	198,000

Agency	Project name	EP component description	Cost (US\$)
United Nations High Commissioner For Refugees	Common Humanitarian Pipeline/Contingency stocks for Emergency Shelter and Non Food Items	Prioritize sector initiatives through planning including <b>contingency planning</b> and harmonization of Sector partner projects and responses	6,816,000
Alsalam Organization For Rehabilitation And Development	Provision of non-food items and emergency shelters to conflict affected population of IDPs and returnees in Blue Nile state	Capacity building of local communities in emergency shelter, <b>disaster preparedness</b> and self-resilience	225,000
Jasmar Human Security Organization.	NFIs distribution to IDPs, returnees and conflict affected in Blue Nile state	Establishment of <b>community disaster preparedness and risk reduction committees</b>	111,494
Johanniter Unfallhilfe	Support of Nutrition Activities in South Darfur	Sudan MoH and partners trained in nutrition in <b>emergency preparedness and response</b> and capacity enhanced to manage acute malnutrition	350,000
SIBRO	South Kordofan Emergency Nutrition Project	Training of MoH staff in emergency <b>nutrition preparedness</b> and disaster management	133,490
Helpage International	The realization of durable solutions for older persons' in West Darfur	<b>Enhance preparedness</b> and strengthen the <b>capacity</b> of national and local actors to address humanitarian needs	496,426
Goal	Reducing the Risk of gender-based violence (GBV) by Empowering Vulnerable, Conflict Affected Women through Informal Literacy and Numeracy Education in Blue Nile State, North Darfur, Khartoum and Kassala State	Strengthen the <b>preparedness and the capacity of national actors</b> to fulfil their protection obligations within the overall humanitarian response	304,033
United Nations High Commissioner For Refugees	Protection and Assistance of IDPs in Khartoum and Protocol Areas and South Sudanese in Sudan	Strengthen the <b>preparedness and capacity</b> of national actors within the overall humanitarian response	4,119,867
Save The Children	Refugees support in Umshalaya-West Darfur	To strengthen national and local <b>capacity</b> in <b>early detection, preparedness and response</b> to emergencies and public health threats in refugee camps	1,612,080
Islamic Relief Worldwide	Life saving and Emergency WASH Response Project in Central Darfur, West Darfur, Blue Nile, South Kordofan and North Kordofan	Training 150 men and women on <b>emergency preparedness and risk reduction techniques</b>	1,380,872
World Health Organization	Support to emergency and recovery water and sanitation (WASH) interventions in Darfur, East and Transitional areas	Support the development of multi-sectoral <b>emergency preparedness and response plans</b> with a special focus on the specific needs of women, girls, men and boys	2,000,900
United Nations Children's Fund	Emergency and Early Recovery WASH Services in Sudan	Strengthen WASH sector coordination and establish WASH coordination mechanisms in new emergency areas. Emergency WASH supplies procured and prepositioned for 50,000 people as part of the emergency preparedness and response	13,900,000
United Nations Environment Programme	Darfur groundwater monitoring programme in critical and high risk IDP camps and locations	Updating of <b>drought preparedness data</b> in these locations to ensure that partners are aware of the status of water resources and possible risk	251,580

## Annex 6. Projects and programmes against categories of emergency preparedness

Actor/activity	
<b>1. Hazard risk analysis and early warning</b>	
	ECHO funding to IFRC, 2009–2012
	World Bank Eastern Nile Flood Preparedness and Early Warning Project
	IGAD Climate Prediction and Applications Centre
	UNDAF, 2009–2012 <ul style="list-style-type: none"> <li>• Institutional capacity for disaster coordination, mitigation and management including early warning, developed and strengthened</li> <li>• Socioeconomic threat, risk mapping and analysis conducted by state governments to reduce conflict through prioritized planning and spending (UNDP, UNEP)</li> </ul>
	UNDAF 2013–16 <ul style="list-style-type: none"> <li>• DRR as a cross cutting theme</li> <li>• Support to disaster risk and loss assessments</li> <li>• Training on DRR/DRM including drought and flood mitigation and health risks in disasters</li> </ul>
	FEWSNET for Sudan
	UNDP Crisis Recovery Mapping and Analysis Project
	UN Information Management Working Group
	WFP: Food Security Monitoring Systems (FSMS)
	FAO/MoA Desert Locust Control system (DLCO)
	GoS HAC Emergency and Humanitarian Directorate Early Warning Centre
	WHO/MoH National sentinel surveillance system: communicable disease surveillance
	WHO/MoH Early Warning and Alert Response Surveillance (EWARS) that covers the internally displaced population in Darfur
	WFP Emergency Preparedness and Response Package and Minimum Preparedness Actions
	Sudanese Red Crescent early warning for floods in Khartoum, River Nile, Sienna, 1999–2002
	Sudanese Meteorological Centre linked to regional (ICPAC) and global meteorological networks
	FAO 2010–2012: Improved institutional and technical capacities of the government and communities in early warning, preparedness, mitigation and response
<b>2. Institutional and legislative frameworks</b>	
	FAO Sudan Institutional Capacity Program: Food Security Information for Action
	UNDAF, 2013–2016: <ul style="list-style-type: none"> <li>• Development of a National Adaptation Plan for Climate Change</li> <li>• National Disaster Risk Management Strategy</li> <li>• National All Hazard Emergency Preparedness Programme</li> </ul>
	MoH, supported by WHO, developing a national 5 year health preparedness plan (to be finalised by April 2013)
	Ministry of Environment and Physical Development 2003: National Communication under the United Nations Framework Convention on Climate Change. Adaptation priority sectors: water, forestry, agriculture and public health
	UNDP/UNEP/HAC/Ministry of Interior/Ministry of Environment: National DRM framework for Sudan. Project proposal under development
<b>3. Resource allocation and funding</b>	
	UN and Partner Work Plan
	Common Humanitarian Fund

<b>Actor/activity</b>	
	UNDAF
	IFRC – Disaster Relief Emergency Fund (DREF) fund (loan based)
<b>4. Coordination</b>	
	The Humanitarian Aid Commission (HAC)
	UN Sector Coordination
	OCHA contingency planning
<b>5. Information management and communication</b>	
	UN Information Management Working Group
<b>6. Contingency/preparedness and response planning</b>	
	Sudanese Red Crescent and University of Sudan produced a Disaster Preparedness training manual in 2005
	FAO 2010–2012: <ul style="list-style-type: none"> <li>• Improve communities' preparedness for and response to livestock-related disasters</li> <li>• To enhance the capacity of the Government and communities in early warning, preparedness, mitigation and response to TADs in North Sudan</li> </ul>
	IFRC 2011 Sudanese Red Crescent Society institutional disaster preparedness and response. A Pan-Sudan contingency plan to respond to potential violence and conflict during and after the referendum, and to strengthen disaster preparedness capacity in an effective and efficient way
	UNDAF technical/institutional and human capacity strengthened for emergency preparedness and response to man-made and natural emergencies (UNICEF, WHO, UNFPA, WFP, UNHCR)
	UNICEF: Education in emergencies and post crisis transition: <ul style="list-style-type: none"> <li>• Sector capacity building, policy and planning</li> <li>• Increased access/resilience of education service delivery</li> <li>• Improved quality of education response in emergencies and post-crisis transitions</li> </ul>
	USAID/OFDA in 2011 supported UNICEF to prepare for potential emergency needs of displaced and affected populations
	UNDP: Since 2008, UNDP in Sudan, through its Crisis and Recovery Mapping and Analysis Project, has been developing a participatory mapping and analysis methodology to enhance crisis responsiveness and evidence-based strategic planning within the UN system and national government
	OCHA contingency plan for 2011 referendum
	OCHA contingency plan for Abyei
	OCHA contingency plan for Sudan
	WFP Emergency Preparation and Response Package (EPRP) and Minimum Preparation Actions
	GoS Strategic Grain reserve
	UNDAF 2012–2016: Training on Disaster Risk Reduction and Disaster Risk Management
	NMAID (national NGO) created Rapid Response Preventive Protection Teams, who collect indicators for conflict prevention
	Over 20 UN agencies, funds and programmes worked together on a comprehensive preparedness plan to run from December 2010 until end of 2011
<b>7. Emergency services/standby arrangements and prepositioning</b>	
	OCHA contingency plan for Sudan – pre-positioning component
	OCHA contingency plan for 2011 referendum – pre-positioning component
	WFP Emergency Preparedness and Response Package (EPRP) and Minimum Preparation Actions
	OCHA contingency plan for Abyei – pre-positioning component

# Case study: financing of emergency preparedness in Haiti

Lillian Fan, Steven Zyck and Sarah Bailey

## Introduction: crisis, poverty and vulnerability

### Crisis context

Haiti is exposed to multiple hazards, including tropical storms, flooding, landslides and earthquakes (CDEMA, n.d.; Klose and Webersik, 2010; World Bank, 2011), and the country has the highest hurricane vulnerability rating in the Caribbean region. According to the World Bank, an estimated 96% of the population is exposed to one or more natural hazards (GFDRR, 2010). Haiti's risk profile is exacerbated by its high level of poverty, which weakens social coping and adaptive capacities. The World Risk Report for 2012 ranks Haiti as fifth out of 173 countries in terms of overall vulnerability to hazards as well as eighth for susceptibility and sixth for adaptive capacity (Alliance Development Works, 2012).

On 12 January 2010, an earthquake measuring 7.0 on the Richter scale struck 17 km southwest of the capital, Port-au-Prince. The earthquake was the most powerful to hit the country in two centuries and the most destructive urban disaster in recent history. The Government of Haiti (GoH) estimated that 222,570 people were killed and that more than 300,500 injured; more than 1.3 million people were left homeless (UN Office of the Special Envoy for Haiti, website.). An estimated 1.5 million children were directly affected. The earthquake caused damage and losses of close to US\$8 billion, equivalent to 120% of the country's annual Gross Domestic Product. The impact of the earthquake was further exacerbated by tropical storms and hurricanes as well as a cholera epidemic, which began in October 2010 and continues to the present.

While the scale of destruction caused by the 2010 earthquake was unprecedented, Haiti has a long history of disasters that have had a devastating impact on lives and livelihoods. In 1770, when Haiti was still a French colony, an earthquake wrought severe damage in Port-au-Prince and the surrounding areas, killing hundreds of people, levelling buildings and causing a tsunami. In 1842, another major earthquake destroyed several cities in Haiti and the neighbouring Dominican Republic. In 1935, at least 2,000 people were killed by a major storm. In 1946, the island of Hispaniola was struck by an earthquake measuring 8.1 on the Richter scale; at least 1,800 people

died in the resulting tsunami. Hundreds of people were killed by Hurricane Hazel in 1954 and, in 1963, Hurricane Flora killed more than 6,000 in Haiti and Cuba. In 1994, Hurricane Gordon killed hundreds more, and four years later, Hurricane Georges killed 400 people and destroyed an estimated 80% of Haiti's crops.

In May 2004, heavy rain caused severe flooding, which killed at least 2,500 people, and a few months later the country was struck by Hurricane Jeanne, which left 1,900 dead and more than 200,000 homeless. In 2007, Tropical Storm Noel killed 57 people, and in 2008 three hurricanes and a storm – Ike, Hanna, Gustave and Fay – struck within a two-month period, killing 800 people, affecting one third of the population and causing some US\$1 billion in damage.

Haiti also suffers severe environmental degradation. An estimated 40% of the country's 27,750 km<sup>2</sup> surface comprises degraded land. Forest cover has fallen from 20% in 1956 to a mere 2% in 2010, with a deforestation rate of 5.7% per year (nearly 30 times the global average). With high levels of soil erosion and land degradation, Haiti is acutely vulnerable, to the impact of both natural hazards and climate change.

The country is also vulnerable to disease, including HIV and AIDS, cholera, malaria, dengue fever and tuberculosis (Fraser et al., 2004; Hood, 2010; Knox, 2011; CIA, 2012). Water-borne diseases, including cholera, spike during the rainy season; and poor sanitation, overcrowding and weak communication systems exacerbate their impact.

Haiti's weak public institutions, decades of political instability and high aid dependency further undermine efforts to develop and sustain an effective national emergency preparedness and disaster management system. While a national framework for disaster risk management, the *Système National de Gestion des Risques et des Désastres* (SNGRD) was established in 2001, efforts to build institutional capacity, establish coordination and monitoring tools, and formulate long-term strategies have been consistently hampered by multiple shortcomings in governance. In the immediate aftermath of the 2010 earthquake, the GoH called for a review of the SNGRD, the strengthening of operational response and preparedness capacities and the development of a legislative framework.

## Poverty profile and causes of vulnerability

Haiti's vulnerability to disasters and environmental degradation is linked to the country's chronic poverty. Haiti is one of the world's poorest countries and the poorest in the western hemisphere, with an overall poverty incidence of 77% against the national poverty line. In 2007, 54% of the country's population of 8.2 million – and 67% of people in rural areas – lived on less than US\$1 a day. An estimated 76% of the population – 86% in rural areas – lived on less than US\$2 a day (CRS, 2007). Many decades of limited investment in agriculture combined with environmental degradation have resulted in a steady deterioration of conditions in the rural areas. This trend has, in turn, fuelled massive and uncontrolled rural-to-urban migration over the past 20 years. More than 60% of Haiti's 9.8 million inhabitants live in urban areas, and almost 35% of these reside in Port-au-Prince. Urban poverty has thus emerged as a major challenge. High population density, unregulated construction, weak land-use planning and limited social and economic public infrastructure further compound the population's vulnerability.

Haiti's deep poverty is reflected in its social indicators: life expectancy at birth is 57 years compared with the Latin American average of 69 years; less than half the population is literate, and less than 25% has access to safe water (CRS, 2007). The 2013 Human Development Report published by the United Nations Development Programme (UNDP) ranked Haiti 166<sup>th</sup> out of 186 countries, with a Human Development Index (HDI) of 0.465, just below Togo and Yemen and just above Uganda, Zambia and Djibouti. Haiti was the only country in the Americas to fall into the 'low human development' category.

Haiti also suffers from extreme income inequality. The country has a Gini coefficient of 59.5, with the richest 10% receiving 48% of the nation's income and the poorest 10% receiving less than 0.9% (Jadoute, 2006; Tradingeconomics, website). Food insecurity is another chronic problem, affecting more than 2 million Haitians and routinely exacerbated by seasonal hazards. The destruction of crops and livestock, combined with spikes in food and fuel prices, have periodically triggered violent protests, as in the aftermath of Hurricane Sandy in late 2012.

The poorest groups in Haiti include female heads of households, wage-dependent rural workers, landless farmers (sharecroppers) and the urban poor. The incidence of rural poverty and extreme poverty is highest in the Nord-Est but also very high in the Artibonite, Nord-Ouest and Centre departments. Almost one quarter of Haiti's poor live in the Ouest department, where Port-au-Prince is located.

The main causes of poverty are the inequality of income and access to resources and services and the resilience of power relations that preserve those inequalities. There is a clear link between poverty, vulnerability and risk in Haiti. In the wake of recent disasters, poverty rates have risen in both urban and rural areas, and poverty is one of the major challenges affecting people's ability to both prepare for and recover from disasters. As such, emergency preparedness must include measures that not only strengthen the ability of national institutions to respond but also increase pre-emptively support for people (i.e., the poor and vulnerable) who are likely to be most negatively affected by disasters and other emergencies.

## Policy environment

### National government institutional and legislative frameworks

The GoH began taking steps to develop a disaster management capacity in the 1980s. Legal provisions were put in place for the development of a national system in the early 1980s, and the Directorate of Civil Protection (*Direction de la Protection Civile*, DPC) was established in 1997. In 1999, the GoH established the aforementioned SNGRD and in 2001 adopted the *Plan National de Gestion des Riques et Désastres*. The SNGRD is Haiti's national disaster and risk management system, which includes a focus on response, preparedness and risk reduction. In 2008, the GoH passed a State of Emergency law, which was amended in April 2010 in the aftermath of the earthquake, to extend to situations of disaster.

### Specific national strategies and plans regarding risk management

The GoH Poverty Reduction Strategy Paper (PRSP) included disaster risk management (DRM) as a cross-cutting priority (GoH, PRSP 2008–2011). DRM was also articulated as a pillar of the United Nations Development Assistance Framework (UNDAF) for 2009–2011, and the World Bank's Country Assistance Strategy (CAS) 2009–2012 also included a component on DRM.

In the aftermath of the 2010 earthquake, the Post-Earthquake Disaster Needs Assessment (2010) and the Action Plan for National Recovery and Development of Haiti included DRM as a cross-cutting priority for both the public and private sectors. In addition to managing and reducing risk, DRM was presented as an opportunity to support decentralisation, strengthen civil society and promote corporate social responsibility and innovation in the private sector. As noted by the Global Facility for Disaster Reduction and Recovery (GFDRR), the inclusion of DRM in these plans and strategies demonstrates a consensus among the GoH and its partners of 'the

importance of integrating DRM as a critical component of successful poverty reduction and economic growth' (GFDRR, 2010).

### **Sectoral strategies and plans**

Under the National DRM Plan, each ministry is required to develop a sector-specific DRM plan and to establish its own DRM committee. Haiti has also developed contingency plans to prepare for certain types of disasters, including hurricanes and, more recently, earthquakes. Some examples of these plans are listed below:

#### ***Hurricane contingency plans***

Since 2003, Haiti has prepared a Hurricane Season Response Plan annually. In the aftermath of the 2010 earthquake, international donors and agencies, including the United Nations and GFDRR, supported the GoH to develop a Hurricane Season Preparedness Strategy that included contingency plans and simulation exercises.

#### ***Seismic contingency plans***

In March 2011, the GoH launched the 'Seismic Risk Prevention Plan for the Great North' with UNDP. This initiative aims to reduce the vulnerability to earthquakes in the Nord, Nord-Ouest and Nord-Est departments by strengthening infrastructure and building the resilience of local populations to minimise vulnerability to seismic risk.

In January 2013, the GoH launched a National Seismic Contingency Plan in hope of establishing a national management tool to enable national and international actors to establish clear roles and responsibilities and to strengthen their respective interventions on preparedness and response. The plan is based on four thematic areas: (i) seismic risk; (ii) strengthening of coordination mechanisms for preparedness and response; (iii) supporting better integration of international activities into the national system; and (iv) strengthening the preparedness and response capacity of national actors, including civil society and the private sector. An action plan consisting of 40 preparedness activities was designed to facilitate the implementation of the contingency plan.

#### ***Health sector***

While some health emergency preparedness trainings had been conducted periodically since the establishment of the SNGRD, prior to the 2010 earthquake very few resources had been invested in emergency preparedness in the health sector. As a result, at the time of the earthquake, Haiti's emergency medical services were not adequately equipped to manage mass casualty emergencies. After the earthquake, with more resources available for emergency response and preparedness, support for health sector emergency preparedness also increased. With the support of international partners, including the World Bank and GFDRR, the Ministry of Health developed

a Mass Casualty Plan (Plan Blanc). (PAHO, 2011) As part of its post-earthquake emergency assistance, The UK Department for International Development (DFID) provided GBP 955,000 to the GFDRR in support of disaster-resilient health facilities. This support included the development of guidelines to make hospitals more resilient to disasters, both operationally and structurally, and a revision of the Plan Blanc, which was tested in two of the country's largest hospitals.

#### ***Food security***

In 1996, the Ministry of Agriculture, Natural Resources and Rural Development created a unit for the National Coordination of Food Security. Its mission is to define, direct and harmonise the activities of all stakeholders working on food security in the country, to monitor and evaluate the situation of food security, to disseminate information and analysis concerning food security and, lastly, to propose food security strategies and programmes. This coordination mechanism comprises an Inter-Ministerial Council on Food Security (CISA) and a *Coordination Nationale de la Sécurité Alimentaire* (National Committee for Food Security) (CNSA). The CISA is composed of five ministries – Agriculture, Health, Planning, Finance and Commerce – and is chaired by the Minister of Agriculture. The Council is charged with proposing various options for national policy on food security and with coordinating the development and implementation of policies and technical cooperation initiatives. The CNSA supports the CISA in the coordination of policies and programmes, monitors the food security situation in the country, assists CISA in the coordination of external assistance and facilitates information sharing and coordination with relevant stakeholders. The structure is advised by an Advisory Council on Food Security, which includes experts from relevant sectors, including civil society.

#### ***Water and sanitation***

The National Water and Sanitation Directorate (DINEPA) was established in 2009. An Emergency Response Department was created in 2011, integrating DINEPA into the SNGRD and strengthening its coordination with national and international partners through the Water, Sanitation and Hygiene (WASH) Cluster. For the 2011–2015 period, 38% of DINEPA's budget is allocated to emergency management, including cholera prevention and response. The United Nations has identified a number of related issues and areas that require further strengthening, including emergency stock management and coordination among WASH stakeholders.

#### ***Cholera prevention and early warning***

Following the outbreak of cholera in Haiti in October 2010, the Ministry of Public Health and Population (MSPP) established an early warning system with the support of the World Health Organization (WHO) and the Pan-American Health Organization (PAHO).

## National leadership and political support

President Michel Martelly and his administration identified DRM as a priority soon after his inauguration on 14 May 2011. Within 60 days of his inauguration and before the installation of his government, President Martelly met with SNGRD and DPC officials to ensure that planning for the summer hurricane season was underway; he also delivered a speech and recommended that 20 municipal disaster management centres be built across the country. President Martelly also called for the strengthening of coordination between the DPC and all others working on disaster management.

Disaster preparedness is also included in the 'Four Es' that Martelly identified as priorities for his term: education, employment, environment and the rule of law (*état de droit*). This establishes environmental rehabilitation and protection as an essential part of reducing Haiti's vulnerability to disasters. Martelly has also overseen the development of contingency plans, including the previously discussed seismic contingency plan launched in January 2013, and a general strengthening of national disaster management capacities.

Moreover, Martelly's administration has demonstrated innovation in disaster preparedness and response, as exemplified by the creation of an emergency fund by the Ministry of Finance. This fund was used for the first time following Hurricane Sandy and Tropical Storm Isaac in late 2012. The emergency fund came from a 1% income tax introduced by the Haitian government in 2012. While recognising the innovative measure, some Haitians, including business leaders, remained concerned whether funds were being used transparently. Some also asked whether, in allocating resources from the emergency fund, the government was prioritising the distribution of hand-outs over longer-term measures such as sustainable recovery and mitigation and preparedness.

## Institutional architecture

### National architecture

#### National System for Risk and Disaster Management

In 1988, the GoH established the Pre-Disaster and Relief Organisation (*Organisation Pré-Désastre et de Secours*, OPDES) to be responsible for disaster-related warnings, evacuation and humanitarian assistance. In 1999, the SNGRD was set up, comprising 26 governmental and non-governmental institutions involved in disaster preparedness and response. The SNGRD sets out institutional arrangements and DRM principles in Haiti and articulates the scope of the system, although its development and implementation have been gradual.

The highest level of decision-making authority and policy-making in the SNGRD rests with the National Risk and Disaster Management Committee (*Comité National de Gestion des Risques et des Désastres*, CNGRD), which is led by the Ministry for the Interior and Territorial Collectives (*Ministère de l'Intérieur et des Collectivités Territoriales*, MICT). The MICT exercises its disaster management responsibilities through the *Direction Générale* and the DPC. The DPC is responsible for operational coordination at national, provincial and municipal levels (GPPI and Groupe URD, 2010). The structure is explained in Figure 1 below.

Below the CNGRD is the Permanent Secretariat of Risk Management and Disaster (SPGRD), which is tasked with coordinating and managing the SNGRD's planned operations (GoH, 2004). The Secretariat has the dual role of risk and disaster management and coordinates the activities of 26 governmental and non-governmental organisations (NGOs) engaged in natural disaster preparedness and response efforts in Haiti (GPPI and Groupe URD, 2010).

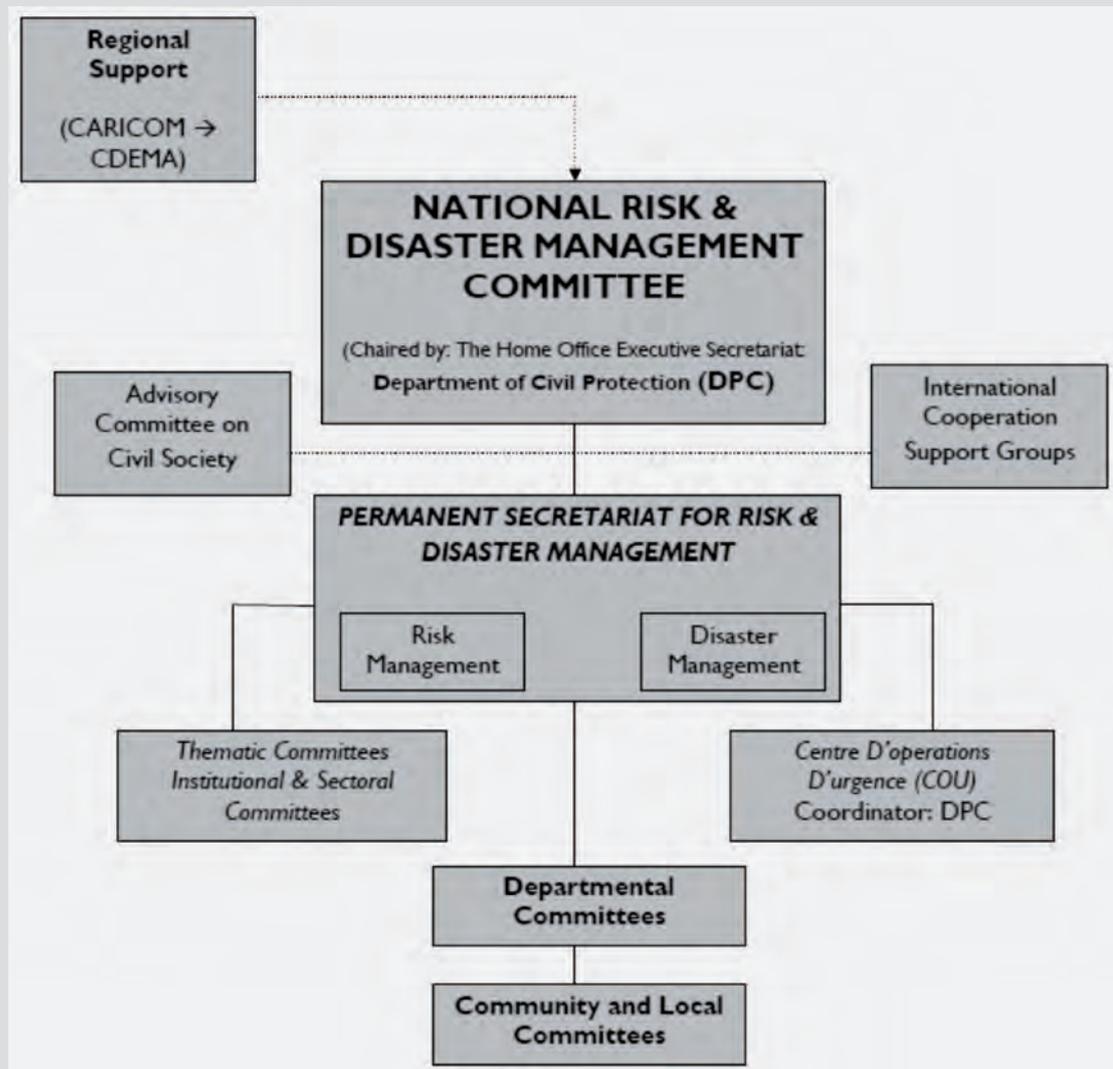
When a disaster strikes, the Emergency Operations Centre (*Centre d'Opération d'Urgence*, COU) brings together the members of the SNGRD's permanent secretariat to coordinate the response. Permanent disaster response committees – small teams tasked with briefing key players in a disaster response – have played an important role, particularly at sub-national levels where there are limited financial and human resources.

The critical role of the DPC has been challenged by limited resources and capacity, which has affected its ability to coordinate preparedness and response efforts. One of its critical weaknesses is that it still lacks the necessary legal status to have its own budget. This has led to the SNGRD to become heavily dependent on donor funding as well as external technical assistance.

#### Development Assistance Coordination Mechanism (CAED)

In 2012, the GoH established the Coordination Framework for Foreign Development Assistance to Haiti (*Cadre de Coordination de l'Aide Externe au Développement d'Haiti*, CAED) within the Ministry of Planning and External Cooperation (MPCE) and under the leadership of the Prime Minister. Within this framework, a joint committee of Haitian agencies (governmental and non-governmental) and key international partners reviews national development priorities and the aid commitments against them. Disaster risk reduction (DRR) is one of the thematic areas within this framework, which will enable the government and its partners to better monitor the range of programmes and foreign aid in support of the DRR agenda. It will also help the GoH to prioritise and coordinate DRR-related activities within the wider range of

Figure 1. DRM in Haiti



development programmes and ensure that they are better aligned to national priorities and programmes.

## International architecture

### Coordination structures

#### *The Inter-Agency Standing Committee (IASC) Cluster System*

The Cluster System was first introduced to Haiti in 2006 but was only activated in 2008 in the wake of the series of hurricanes that caused extensive damage across much of the country that year. Following the 2010 earthquake, Clusters became the main mechanism for the coordination of humanitarian agencies, and a total of 12 were established, including Camp Coordination and Camp Management, Shelter and Non-food Items, Water and Sanitation, Health, Education, Agriculture, Protection, Early Recovery and Logistics.

While the Cluster mechanism was quickly activated after the 2010 earthquake, its detachment from Haiti's national

emergency structures resulted in an internationally led response with an institutional vacuum at the national level (PAHO, 2011). Evaluations of the Haiti Cluster response found that cooperation between international and national actors was limited at both central and local levels in the immediate aftermath of the emergency (GPPI and Groupe URD, 2010). Indeed, after the earthquake, the GoH did not activate the COU under the SNGRD. This situation must be understood as a result not simply of inadequate financing. It also resulted from the insufficient level of attention paid by all stakeholders to the establishment of clear institutional standby arrangements linking national and international coordination response mechanisms (PAHO, 2011).

As one study recommended, joint preparedness efforts must include formal and detailed coordination arrangements between international and national institutions (PAHO, 2011). As the incidence of large-scale disasters remains high in Haiti, establishing clear standby arrangements – and enhancing the capacity to activate

and facilitate them – must be integrated into the country’s emergency preparedness strategy. The international humanitarian mechanism in Haiti is currently undergoing such an exercise. In 2011, the UN Humanitarian Coordinator initiated a Cluster transition plan as part of a broader transfer of humanitarian responsibilities and capabilities from international to national agencies. As of 2012, the four remaining Clusters are Camp Coordination and Camp Management, Health, Water and Sanitation and, lastly, Protection. At the same time, international agencies are now supporting the GoH to take the lead in managing emergency response and preparedness through the SNGRD.

**Groupe d’Appui de la Coopération Internationale (GACI)**

In 1998, the GoH established the International Cooperation Support Group (*Groupe d’Appui de la Coopération Internationale*, GACI) within SNGRD to coordinate international assistance. GACI’s mandate is to coordinate international agencies involved in disaster preparedness and response, mobilise finances and harmonise technical cooperation. During an emergency, GACI coordinates regular meetings, facilitates information sharing and integrates international efforts into the GoH’s plans in coordination with all relevant international actors, including UN agencies and donors.

**UN Stabilisation Mission in Haiti (MINUSTAH)**

On 30 April 2004, the UN Security Council adopted Resolution 1542 establishing the United Nations Stabilization Mission in Haiti (MINUSTAH). MINUSTAH was originally established to: (i) support the Transitional Government of Haiti in ensuring a secure environment through respect for the rule of law and public safety; (ii) assist in strengthening and reforming the Haitian National Police; and (iii) assist in organising and monitoring free and fair elections. In the aftermath of Hurricane Jeanne in 2004, MINUSTAH also established coordination mechanisms for humanitarian and development actors, known as the *Tables de Concertations* (TDCs) and the *Tables Sectorielles* (TSs), which were focused on information sharing and other tasks. By 2009, the TDCs and TSs had been established in three of Haiti’s 10 provinces. MINUSTAH’s Humanitarian and Development Coordination Section (HDCCS) coordinates this mechanism; MINUSTAH intends to integrate the Clusters and the TDCs into the SNGRD in the future.

**Regional DRM architecture**

Concerted efforts to establish regional-level disaster management initiatives in the Caribbean began in the 1980s (Poncelet, 1997). The Pan-Caribbean Disaster Preparedness and Prevention Project was established in 1984 with the assistance of the American, Canadian and Dutch governments and the United Nations Disaster Relief

Organization (UNDRO). In the aftermath of Hurricane Gilbert in Jamaica in 1988 and Hurricane Hugo in the eastern Caribbean in 1989, the main Caribbean regional organisation, the Caribbean Community and Common Market (CARICOM), decided to create a sub-regional response agency. In 1991, CARICOM established the regional inter-governmental Caribbean Disaster Emergency Response Agency (CDERA) (PAHO, 1994).

CDERA was mandated to coordinate the immediate response to any disastrous event affecting any of its 16 Participating States, provided the government requested such assistance. In addition, CDERA was tasked with: (a) securing, collating and channelling comprehensive and reliable data on disasters affecting the region to governmental and non-governmental partners; (b) establishing and maintaining disaster response capabilities in Participating States; and (c) mobilising and coordinating relief from government agencies and NGOs. In 1999, CDERA was renamed the Caribbean Disaster Emergency Management Agency (CDEMA), marking its embrace of the principles and practice of a comprehensive disaster management framework, moving away from a response and relief model to “a comprehensive approach to include all hazards, all phases of the disaster management continuum (mitigation, prevention, preparedness, response and recovery) and all sectors of society” (CDEMA, website). CDEMA’s motto – “Managing Disasters with Preparedness” – reflects its commitment to preparedness within the broader DRM framework; preparedness was included in CDEMA’s Comprehensive Disaster Management Strategy and Programme Framework for 2007–2012 (CDEMA, website).

The CDEMA Council, which meets every June, is the highest policy-making forum among heads of states. The Management Committee of the Council (MCC) is tasked with making recommendations to the Council and undertaking performance reviews related to disaster management. CDEMA also has a Technical Advisory Committee, which has four sub-committees: the Information Communications Systems Advisory Sub-Committee; the Plan Development and Review Sub-Committee; the Climate Change, Disaster Risk Reduction and Environment Sub-Committee; and the Work Programme and Review Sub-Committee. The CDEMA Coordinating Unit functions within a comprehensive disaster management framework, and its functions are centred on four areas: (i) education, research and information; (ii) finance and administration; (iii) preparedness and response; and (iv) mitigation and research.

CDEMA is a key regional resource for supplementing Haiti’s national disaster management system, in terms both of response and preparedness, as demonstrated by the agency’s quick response in the aftermath of the

2010 earthquake. The agency was able to send in help within 24 hours through the CARICOM Disaster Relief Unit (CDRU), led by the Jamaica Defence Force. By 18 January 2010 – six days after the earthquake – the CDRU had already helped to identify severely affected areas that had not received any humanitarian assistance. In total, CARICOM's response effort consisted of 213 people from 11 countries in the region: 184 military personnel, 25 medical personnel and four technical support personnel. CDEMA also facilitated regional fund-raising efforts by establishing an account for channelling aid.

## Current preparedness

The overall preparedness picture in Haiti is mixed. On the one hand, there has been significant progress in the GoH ownership of the DRR and preparedness agenda at a strategic level, and DRM is increasingly articulated as a key development and humanitarian priority. The GoH's vision and leadership on this issue, however, need to be better institutionalised within the legal and bureaucratic system. At the national level, while there has been increasing support to the SNGRD and the DPC, the latter still lacks legal status and therefore has no independent budget. At the same time, there is a need to strengthen the institutionalisation of preparedness at sector level.

While the national framework for DRM is becoming more consolidated, the general approach to funding preparedness is still fragmented across a multiplicity of mechanisms, with little real coordinated planning between humanitarian and development donors to ensure that gaps are closed. As a result, emergency preparedness in Haiti remains limited, disjointed and uneven across regions and sectors. While financial support for preparedness activities from humanitarian funds did increase after the earthquake (see 'Financial analysis' section below), the investment in preparedness remained small compared to overall humanitarian funding. At the same time, humanitarian funding continues to decrease to pre-earthquake levels (e.g., declining from US\$1.1 billion in 2010 to 61 million in 2012). While development funds for DRR have increased overall, funding allocated specifically for emergency preparedness remains low (as discussed in the next section).

There is currently no common and coherent conceptual framework among international agencies and donors for the range of interventions being undertaken on preparedness. This indicates that recognition of the importance of preparedness by the GoH and international agencies in Haiti has not yet translated into the clear articulation of a preparedness vision or a coherent funding plan, a difficult task in a context where

emergency response has dominated the aid agenda. The UN aims to ensure that humanitarian coordination mechanisms are fully transferred to the GoH by the end of 2013. At the same time, however, it will be critical to ensure that the international community's support for key short-term preparedness activities, such as stock pre-positioning, are sustained while local systems and capacity is being built over time (OCHA, 2012).

Since the creation of the SNGRD in 1999, the GoH has been focusing on the gradual implementation of the national plan and the development of its disaster management institutions and capacities. Its efforts to develop disaster management capacity have been supported by a handful of international partners, notably UNDP, the European Union, the World Bank and the Inter-American Development Bank (IDB). Support for preparedness has focused on: (a) the development of contingency plans; (b) the organisation of simulations; (c) the development of early warning systems; (iv) the creation of hazard and risk maps; (v) the creation of new emergency operations centres; (vi) the development of central and municipal-level response capacity; (vii) the secondment of staff and technical experts; and (viii) the conduct of DRM capacity assessments.

UNDP is supporting an assessment of national DRR capacities, and the United Nations Procurement Division (UNPD) support for the national DRM plan began in 2000, with the creation of the SNGRD. These have been the main sources of external technical assistance and capacity-building for the GoH in DRM. UNDP also provided a seismologist to the GoH who, over two years, helped to set up a seismological technical unit located in the Bureau of Mines and Energy; the seismologist is currently supporting seismic reduction in three departments in the north of the country.

In 2004, the DPC, with the support of the United Nations and the United States Army Southern Command, developed a National Plan of Action for the hurricane season that included simulation exercises and the training of DRM committees to develop local-level contingency plans. In 2005, the government commissioned the development of a methodology for designing flood hazard maps, from which two pilot flood maps were developed. Early warning systems and protocols were established, and public awareness campaigns were held throughout the 2005 hurricane season (Herard, 2011). The GoH also initiated the development of a database of damage using the Disaster Inventory System (DESINVENTAR). In addition, the SNGRD prioritised the strengthening of local capacity for preparedness and response, establishing management committees in all 10 departments and more than 110 out of 144 communes. Evacuations increased from 6,000 in 2006 to 122,000 in 2008, demonstrating the effectiveness of early warning and public awareness

of disaster risks and preparedness. The GoH has also undertaken initiatives to map risk.

In support of these efforts, in 2005 the World Bank launched a three-year US\$12 million programme called the Emergency Recovery and Disaster Management Project (*Projet d'urgence de gestion des risques et désastres*, PUGRD). In 2011, the project received an additional US\$20 million. Its main objectives were to strengthen the DPC, improve coordination with the SNGRD and support the creation of a network of municipal/commune-level emergency preparedness committees (Herard, 2011). The Haitian Red Cross and the International Federation of Red Cross and Red Crescent Societies (IFRC) have also been engaged in disaster preparedness at the community level.

The 2010 earthquake generated renewed attention on DRR and emergency preparedness in Haiti, although the earthquake and cholera responses dominated the humanitarian agenda. Preparedness activities have ranged from contingency planning, simulations and warehouse construction to stockpiling relief supplies and technical assistance (e.g., to the DPC). Since 2011, preparedness has played an increasingly important role in international engagement in Haiti; this new focus emerged from analyses that showed that the country required the transfer of responsibility, systems and capacities from international entities (e.g., Clusters) to national institutions. Within this context, in 2011 the UN Country Team, under the leadership of the then-Humanitarian Coordinator Nigel Fisher, initiated the transition process, transferring humanitarian coordination mechanisms to state structures and the SNGRD. Indeed, there is recognition of the need to change the focus of humanitarian engagement in Haiti from response to preparedness. It is also recognised that disaster preparedness is a development and not merely a humanitarian issue and that it should be financed from national and external sources.

The focus on national actors is not limited to the state. There is an increasing awareness of the importance of involving the private sector and civil society in DRR in general, and in emergency preparedness more specifically. Local citizens' groups have been active in emergency preparedness, including one platform that claimed to have 5,000 members. Platforms for both the business sector and civil society are now being more systematically engaged by the Humanitarian Coordinator's office and the Office for the Coordination of Humanitarian Affairs (OCHA). In 2012, at the request of the UN Humanitarian Coordinator, the United Kingdom provided the United Nations with a specialist on public-private partnerships to conduct a forward-looking review of the 2010 earthquake response and to explore strategies for

integrating the private sector into the Haiti Earthquake Preparedness Plan as a potential first responder.

Some of Haiti's largest companies have taken up disaster preparedness very seriously, both in terms of their own preparedness (i.e., focused on their core operations and assets), and in the services they provide to support preparedness in society at large through existing delivery mechanisms, such as the distribution of SMS alerts by mobile company Digicel. In 2006, a private-sector coalition known as *Alliance pour la gestion des risques et la continuité des activités* (AGERCA) was established, with 15 members representing a wide network in the private sector, such as Digicel, Comme Il Faut, UNIBANK, Rebo, Nassa and AIC Insurance. Large companies generally have contingency plans. However, engagement with small- and medium-sized enterprises (SMEs) on preparedness has been weak, and there are few exogenous incentives for SMEs to take preparedness seriously. The private sector's links with the Haitian diaspora has also facilitated the introduction of standards and best practice from abroad (e.g., New York State and California). Some of AGERCA's members also have facilitated the development of preparedness teams within companies, the improvement of delivery mechanisms and the development of a strategic plan to engage SMEs in preparedness.

Both gradual and sudden onset disasters in Haiti have an enormous impact on people's livelihoods, particularly those of the poor. Hurricanes and floods often destroy crops and rural livelihood assets, while earthquakes cause devastating damage to property and result in loss of income and prevent access to financial resources. In spite of this, however, emergency and disaster preparedness in Haiti has not focused sufficiently on livelihood preparedness. Livelihood preparedness could include the identification of hazards and at-risk communities, the training of local partners, supply chain preparedness, strengthening of coordination mechanisms and the development of local financial institutions and mechanisms. Research shows that local entities, including micro-finance institutions, can play an important role in disaster preparedness and mitigation, particularly in providing much-needed liquidity in the aftermath of a disaster to compensate poor communities for loss of life and property. Micro-finance and micro-insurance schemes linked to disaster mitigation are already being explored in Haiti, including the MiCRO initiative, led by Fokonze, one of Haiti's largest micro-insurance institutions with more than 50,000 clients. More systematic research is needed on the viability of particular schemes for preparedness in the Haitian context, including index-based micro-insurance and cash transfer programmes. However, it is clear that local livelihood security remains under-prioritised in current emergency preparedness in the country.

## Financial analysis

### National budget

The GoH 2012–2013 budget allocated HTG 327.5 million (US\$7.55 million) to DRM, of which HTG 100 million (US\$2.30 million) is from the GoH's own resources and HTG 227.5 million (US\$5.25 million) is from external sources (GoH, 2012). The major part of this funding is allocated to the Ministry of Interior and Territorial Collectives. In addition, the Ministry of Environment was allocated HTG 135 million (US\$3.11 million) for programmes of DRR, including flood-related risk reduction.

Among the range of activities that will be financed by these funds, the GoH lists the training of nearly 2,000 civil protection officers, public awareness programmes, the enhancement of assessment capacities, the development of communication plans and the development of the legal framework for disaster management.

In addition, the GoH made funds available from the public treasury for emergency response, which is made up from a 1% income tax introduced in 2012. This was used for the first time in the wake of Hurricane Sandy and Tropical Storm Isaac in late 2012, with the disbursement of HTG 5 billion (US\$115 million).

While the inclusion of DRR and preparedness-related activities in Haiti's budget is positive, these remain focused on year-by-year activities and are insufficiently connected to medium- and long-term policy objectives. The GoH's preparedness planning and budgeting would be strengthened and made more sustainable through the

adoption of forward-looking and medium-term budgeting tools, such as a Medium-term Expenditure Framework (MTEF), as part of broader budget reform and public financial management efforts. Such an approach could enable better linking of policy objectives to the allocation and expenditure of resources, combined with more robust fiscal control of and accountability for preparedness. Off-budget donor support for preparedness should correspond to the GoH's priorities as articulated and calculated through the MTEF budget formulation process.

### International financing mechanisms

#### General aid profile for Haiti

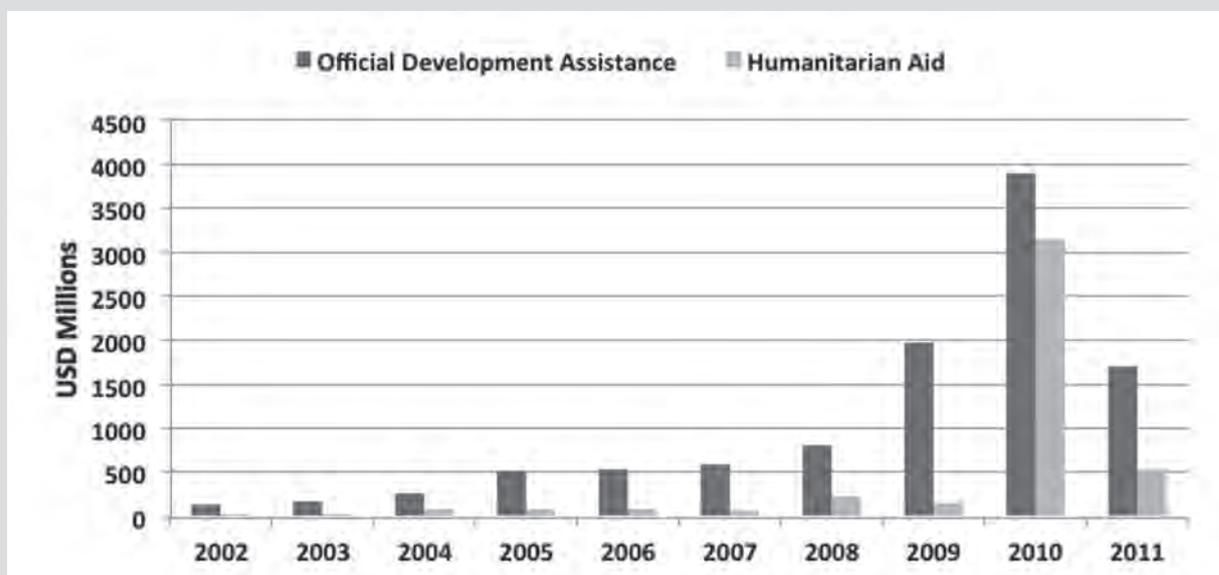
Figure 2 illustrates the general aid profile for Haiti between 2002 and 2011.<sup>1</sup> Haiti received US\$9–10 billion in official development assistance (ODA) between 2002 and 2011, making it the 25<sup>th</sup> largest recipient of ODA globally during this period. The United States, Canada and the European Commission have consistently been the primary donors, with the United States being the largest donor in seven out of the 10 years. IDB is Haiti's largest source of multilateral development aid, providing approximately US\$650 million between 2002 and 2007.<sup>2</sup> Until 2009, humanitarian aid was a small proportion of ODA, provided in response to periodic tropical storms and hurricanes and in response to food price shocks in 2008–2009.

The earthquake that struck Haiti in January 2010 changed the financing picture in several ways. The response to

<sup>1</sup> Unless otherwise stated, data on ODA and humanitarian assistance in this section comes from the OECD-DAC (<http://stats.oecd.org/>), [globalhumanitarianassistance.org](http://globalhumanitarianassistance.org) and [aiddata.org](http://aiddata.org).

<sup>2</sup> IDB was the single largest donor in 2003 and 2005

Figure 2. General aid profile for Haiti



Source: [Globalhumanitarianassistance.org](http://Globalhumanitarianassistance.org) (humanitarian aid) and OECD-DAC CRS data (ODA).

the earthquake became one of the largest international humanitarian interventions of the last two decades. ODA more than doubled from 2009 to 2010; humanitarian assistance increased 20-fold to US\$3.1 billion. The balance of overall financial flows shifted overwhelmingly towards humanitarian assistance in 2010; in 2011 humanitarian financing remained nearly a third of ODA despite significant decreases in humanitarian funding. Data was not available on 2012 ODA, but presumably the proportion of humanitarian aid has decreased as the earthquake response shifted towards recovery. Even with the inevitable decrease in ODA following the spike in humanitarian assistance in 2010; ODA in 2011 was the equivalent of 23.3% of Haiti's gross national income.<sup>3</sup>

While the major donors remained the same, the diversity of donors providing assistance to Haiti broadened after the earthquake. According to OCHA's Financial Tracking Service (FTS), 108 countries provided humanitarian financing, though more than half provided donations of US\$1 million or less. The single largest source of funding for relief efforts in 2010 took the form of US\$1.3 billion in private donations (i.e., individuals and corporations).<sup>4</sup> The earthquake created new financing channels, mainly the Haiti Reconstruction Fund, which was established to finance government-led reconstruction.

### Humanitarian financing

#### *Flash Appeal*<sup>5</sup>

The 2010 Haiti Flash Appeal raised US\$1.1 billion. Flash appeals are urgent funding requests to meet humanitarian needs. Their focus is on saving lives and protecting livelihoods in the three to six months after a disaster – a focus that makes them an unlikely source of major funding for emergency preparedness. In the 2010 Haiti Flash Appeal, six of the 351 projects requested funding for emergency preparedness and risk reduction, mainly in relation to early warning and the approaching hurricane season.<sup>6</sup> The Flash Appeal provided partial funding to three of the projects totalling US\$2.98 million – less than 0.5% of the total funding.

#### **Consolidated Appeals Process and Humanitarian Action Plans**

Consolidated Appeals Process (CAP) and Humanitarian Action Plans (HAPs) are annual funding requests and

strategies for humanitarian assistance, prepared by the Humanitarian Coordinator with support from OCHA. From 2011 to September 2013, US\$317 million was financed through CAPs/HAPs. The Financial Tracking Service, which tracks the funding of appeals and projects within them, is based on humanitarian sectors (e.g., food, shelter, protection) and does not have markers for emergency preparedness. This makes it difficult to track the extent to which these appeals have funded emergency preparedness. With this caveat in mind, there are several indications that the appeals have funded emergency preparedness activities to a certain extent.

The 2011, 2012 and 2013 appeals for Haiti all include objectives on preparedness (OCHA 2010, 2011, 2012). The 2013 HAP has an objective to shift humanitarian response plans and coordination away from the international community to the GoH. It is anticipated that moving humanitarian coordination mechanisms to national structures and promoting increased response capacities will support government leadership in responding to future disasters. The mid-term review of the HAP stated that a Coordination Transition Plan, detailing the transfer of humanitarian coordination structures to national counterparts, was completed in the first quarter of 2013 and was awaiting approval from national counterparts. A total of US\$17 million would be required to implement the Coordination Transition Plan, though the only costs included in the 2013 HAP were for the transition of the remaining coordination clusters not yet handed over to the Government (US\$1.8 million was requested, which was 43% financed as of September 2013 according to FTS). Based on a review of the 2011–2013 plans, it is estimated that they resulted in US\$2 million of funding for emergency preparedness.

The revised 2013 HAP references the national strategy and contingency plan prepared by the Directorate of Civil Protection and the role of international humanitarian actors supporting it, listing six emergency preparedness projects. However, these projects have received very little financing (OCHA, 2013). It is rare that CAPs/HAPs are fully funded, but Haiti appeals in recent years have fallen below global averages (in 2012 the appeal was 46% funded; as of September 2013 it was 42% funded). The projects under the emergency preparedness objective had received only 4% of the requested US\$6.4 million funding as of September 2013. This suggests that humanitarian donors will not prioritise emergency preparedness activities in the context of limited humanitarian resources for CAPs/HAPs. The Haiti appeals have funded emergency activities with preparedness components, such as shelter activities that include measures for preparing camp populations for hurricanes.

<sup>3</sup> [globalhumanitarianassistance.org](http://globalhumanitarianassistance.org)

<sup>4</sup> OCHA Financial Tracking Service

<sup>5</sup> Information on the financing of Flash and Consolidated appeals comes from FTS

<sup>6</sup> A US\$7 million proposal by the International Organization for Migration (IOM) was much broader than immediate hurricane risks, seeking to conduct a disaster vulnerability assessment and support the development of a disaster preparedness plan with the GoH. It was not funded.

### **Haiti Emergency Relief Response Fund (ERRF)<sup>7</sup>**

The Haiti ERRF is an un-earmarked pooled funding mechanism for Haiti managed by OCHA. It was established in 2008 to kick-start critical activities in the hurricane season. Its budget dramatically increased following the 2010 earthquake and, since its inception, the Haiti ERRF has funded 98 projects for US\$83 million. The ERRF aims to provide rapid and flexible funding to address urgent and unforeseen humanitarian needs. Despite this focus, funds have been used to support projects with preparedness components, related mainly to cholera outbreaks. In 2011, there were 11 such projects; 10 concerned the cholera outbreak and the final one was to fund the Communicating with Disaster Affected Communities (CDAC) network in Haiti. The total financing for emergency preparedness is estimated to be a proportion of the US\$3.5million for these projects that have both response and preparedness elements. Given the focus on meeting unforeseen humanitarian needs, there is little reason to think that the ERRF will be a major channel for preparedness financing, unless there is a shift in financing priorities.

### **Central Emergency Response Fund (CERF)<sup>8</sup>**

Between 2006 and 2013, Haiti received US\$90.7 million through the CERF. The CERF is a humanitarian fund established by the UN General Assembly to enable more timely and reliable humanitarian assistance. The CERF's objectives are to promote rapid responses and respond to underfunded crises. It does not fund explicit emergency preparedness activities. However, in 2012 and 2013, the CERF provided US\$1.9 million in funding for projects that included preparedness components, particularly those related to cholera.

### **Private financing**

The 2010 earthquake sparked a surge in private funding with US\$1.3 billion donated by individuals and corporations, accounting for one-third of humanitarian financing in 2010.<sup>9</sup> Private funding enables flexible use by major recipient agencies like the IFRC and Partners in Health. It is not clear whether this flexibility affected the extent of disaster preparedness activities. The American Red Cross, for example, has engaged in community-based preparedness activities, such as through mobilising committees to activate early warning systems in camps and to help evacuate people to pre-established safer locations.<sup>10</sup> However, it is difficult to know how the flexibility of private funding influenced humanitarian responses, including attention to preparedness.

### **DRM and crisis prevention**

#### **Global Facility for Disaster Reduction and Recovery (GFDRR)**

The GFDRR in Haiti has contributed to preparedness through projects executed by the World Bank and UNDP.<sup>11</sup> In 2012, GFDRR awarded US\$6.3 million, of which 94% was executed by the World Bank. The portfolio of programming focuses on DRM mainstreaming, capacity building, multi-hazard assessment, reducing disaster risk in health infrastructure, structural assessment, cholera prevention, disaster recovery and vulnerability reduction. Four projects, totalling US\$3.5 million, have preparedness elements. While the fund supports emergency preparedness measures like capacity building, the total amount of funding through this mechanism is small compared to other financing sources in Haiti in recent years, e.g. CAPs, Haiti Reconstruction Fund.

#### **Crisis Prevention and Recovery (CPR) Thematic Trust Fund (TTF)<sup>12</sup>**

The CPR TTF was established by UNDP in 2000 as a flexible funding mechanism allowing UNDP to respond effectively to the need for disaster prevention and recovery. The categories of financing are: crisis prevention and recovery, disaster risk reduction and recovery, and early recovery. In 2011, the fund disbursed US\$111.3 million globally, of which US\$11.4 million was allocated to Haiti. Most (US\$7.8 million) of the funding went to early recovery, 28% (US\$3.2 million) to conflict prevention and 3% (US\$396,000) to DRR. In 2010, Haiti received US\$15.8 million from the CPR TTF, of which 15% went to crisis prevention and 2% to DRR.<sup>13</sup> In 2012, US\$3.8 million was received for early recovery. Financing for preparedness is estimated to have totalled less than US\$200,000. While the CPR TTF is an evident and possible source of funding for emergency preparedness measures related to crisis prevention and, to a lesser extent, DRR, the predominant use of the fund since the earthquake has been for early recovery.

### **Adaptation funds**

#### **Pilot Program for Climate Resilience (PPCR)**

The PPCR is a programme of the Strategic Climate Fund (SCF), which is one of two funds within the framework of the Climate Investment Funds (CIF). The PPCR funds investments and technical assistance to support countries' efforts to integrate climate risk and resilience into development planning and implementation.<sup>14</sup> Haiti

<sup>7</sup> <https://haiti.humanitarianresponse.info/funding/emergency-relief-response-fund-errf>

<sup>8</sup> <http://www.unocha.org/cerf/>

<sup>9</sup> Financial Tracking Service

<sup>10</sup> <http://www.redcross.org>

<sup>11</sup> GFDRR (2012) *Haiti Country Update*. <http://www.gfdr.org/sites/gfdr.org/files/HAITI.pdf>

<sup>12</sup> Data from CPR TTF annual reports, available at <http://www.undp.org>. These figures include the CPR TTF and UNDP regular resources for crisis prevention and recovery.

<sup>13</sup> The research did not examine the specific projects funded to establish the inclusion of emergency preparedness objectives and components.

<sup>14</sup> [https://www.climateinvestmentfunds.org/cif/Pilot\\_Program\\_for\\_Climate\\_Resilience](https://www.climateinvestmentfunds.org/cif/Pilot_Program_for_Climate_Resilience)

is one of the pilot countries. In 2011, the PPCR provided US\$450,000 in financing to support the preparation of Haiti's Strategic Program for Climate Resilience.

In 2012, a Strategic Program for Climate Resilience (SPCR) was elaborated, which takes two approaches to adaptation: (a) confronting climate risks that lead to disasters, and (b) anticipating climate risks that will intensify over time as a result of climate change (CIAT, 2012). Funding for four projects totalling US\$25 million was requested, focusing on climate proofing infrastructure and agriculture, climate change adaptation in coastal cities and strengthening climate data to inform decision-making (Ibid.). The PPCR Sub-Committee approved initial disbursements of US\$1.2 million for the four projects. The PPCR remains at an early stage in Haiti. If the fund lives up to its projected financing of US\$1.3 billion, it will be an important future source of funding for a wide variety of climate change related initiatives – with a strong focus on understanding and managing climate risks rather than preparing for disasters caused by them.

#### **Least Developed Countries Fund/Global Environment Facility (GEF)**

The GEF has provided US\$11.5 billion in grants for projects related to climate change, land degradation and other environmental issues since its inception in 1991.<sup>15</sup> The GEF has financed US\$26.2 million of projects in Haiti since 1998, of which US\$8.8 million was classified as related to climate change. With the exception of a US\$2.7 million FAO project for DRR in agriculture after the 2010 earthquake, most projects have been related to sustainable resource management, biodiversity and climate change adaptation (CCA), with no links to emergency preparedness.

<sup>15</sup> <http://www.thegef.org>

#### **Haiti Reconstruction Fund<sup>16</sup>**

In response to a request from the GoH in March 2010, the IDB, the World Bank and the UN established the Haiti Reconstruction Fund as a multi-donor fund to support the government's Action Plan for the Recovery and Development of Haiti and related initiatives. The contributions to the Haiti Reconstruction Fund total US\$380 million, making it the largest source of financing for reconstruction. Approximately US\$274 million has been allocated to 17 projects since 2010.<sup>17</sup> Four projects have emergency preparedness and DRR objectives, accounting for US\$34 million (12%) of disbursements (see Table 1). The only project with a sole focus on preparedness is 'Capacity Building for Disaster Risk Management' (US\$2 million). The Haiti Reconstruction Fund will remain a potential source of funding for emergency preparedness linked to reconstruction activities, but only in the short term, as it is scheduled to finish in 2017.

#### **Regional mechanisms**

##### **Caribbean Catastrophe Risk Insurance Facility (CCRIF)**

The CCRIF, a regional fund for Caribbean governments, was established in 2007.<sup>18</sup> Its aim is to limit the financial impact of disasters by providing quick financial liquidity in the aftermath of a disaster. The CCRIF is the world's first multi-country risk pool and also the first insurance scheme to develop parametric policies supported by both traditional and capital markets. It operates as a non-profit

<sup>16</sup> <http://www.haitireconstructionfund.org/portfolio>

<sup>17</sup> This figure excludes secretariat costs.

<sup>18</sup> The CCRIF was developed with funding assistance from the Japanese Government, and was capitalised through contributions to a multi-donor Trust Fund by the EU, the World Bank, the governments of Canada, the UK, France, Ireland, and Bermuda and the Caribbean Development Bank, as well as membership fees paid by participating governments.

**Table 1. Haiti Reconstruction Fund funding for DRR and emergency preparedness objectives**

Project	Partner	Total project amount (US\$)	Haiti Reconstruction Fund contribution (US\$)	Description
DRR in the South Department	UN	11,000,000	8,000,000	Contribute to DRR through the development and management of watershed basins, employment generation and agricultural development in the South Department
Natural Disaster Mitigation in the South Department	IDB	34,000,000	14,000,000	Reducing environmental and socio-economic vulnerability to natural disasters
Capacity Building for Disaster Risk Management	UN	2,000,000	2,000,000	Increase the capacity of the government to prepare for and manage disaster risk by reinforcing the Department of Civil Protection and rehabilitating and/or building evacuation centres in priority areas
Earthquake Prevention Plan for the North of Haiti	UN	9,960,000	9,960,000	Reduce the vulnerability of the Northeast, North and Northwest against seismic threats by strengthening the resilience of the infrastructure and population

mutual insurance entity, registered in the Cayman Islands. Engagement in the regional insurance facility is part of Haiti's DRM strategy.<sup>19</sup>

Since its inception in 2007, CCRIF has made eight pay-outs totalling more than US\$32 million to seven member states, all transferred in less than a month after the event. Within 14 days of the 2010 earthquake, the CCRIF paid the GoH US\$7,753,579 – the full amount due to the country based on its catastrophe insurance policy for earthquakes for the 2009/10 policy year. The amount was equivalent to approximately 20 times the premium of US\$385,500 paid by the GoH. The Caribbean Development Bank also approved a grant of US\$2.6 million to the GoH to pay its 2012/2013 premium. Participation in the CCRIF enabled access to liquidity in the aftermath of the earthquake (albeit on a relatively small scale given the scope of devastation) and the requirements of the scheme could contribute to more robust emergency financial preparedness.

#### **Other regional mechanisms and bodies**

The Organization of American States (OAS) created the Inter-American Committee of Natural Disaster Reduction (IACNDR) in 1999. The IACNDR is responsible for coordinating the implementation of the Inter-American Strategic Plan for Policy on Vulnerability Reduction, Risk Management and Disaster Response (IASP). The IASP seeks to reduce the loss of human life and property, improve emergency preparedness and response, improve financial protection from catastrophic loss and make economic and social infrastructure more resilient for sustainable development and hemispheric security.<sup>20</sup>

Created in 2009, the Caribbean Disaster Emergency Management Agency (CDEMA) replaced the Caribbean Disaster Emergency Response Agency (CDERA). It provides a small amount of financing in the region through the Canada Caribbean Disaster Risk Management Fund (CCDRM), funded through the Canadian International Development Agency's (CIDA's) regional Caribbean Disaster Risk Management Program (CDRMP). The CCDRM Fund provides grants to NGO, community and voluntary organizations and government agencies based in CARICOM member states for small-scale, local disaster risk reduction projects (i.e., US\$25,000–75,000).<sup>21</sup> No specific information on project flows to Haiti was located for this research; the fund is small and targeted at local-level initiatives. More generally, CDEMA engages in a broad range of emergency preparedness activities, including training for disaster risk management, institutional strengthening, development of model disaster legislation for adaptation

and adoption by participating states, development of disaster information and communication systems, and public awareness.<sup>22</sup>

#### **Multilateral development banks**

##### **World Bank**

The World Bank has provided substantial support to disaster risk management in Haiti. GFDRR identified several World Bank projects with 'DRM-related' objectives worth US\$194 million, including a US\$60 million International Development Association (IDA) operation to enhance national risk assessment, disaster response capacity and resiliency of critical transport infrastructure. Most (US\$95 million) of the funding went to an earthquake recovery programme designed to repair or rebuild houses, upgrade neighbourhoods and provide basic services (GFDRR, 2010), thus to activities with risk incorporated into their design as opposed to emergency preparedness.

The 2013–2014 Interim Strategy states that the 2009–2011 Country Assistance Strategy laid the foundations for disaster risk management capacity, which was heavily used by the GoH in response to the earthquake. The Interim Strategy has a strategic objective to reduce vulnerability and increase resilience, aiming to strengthen Haiti's national capacity to respond, manage and prevent disaster-related crises through existing programs and additional financing. IDA will continue its longstanding support to the Government's Disaster Risk Management System (WBG, 2013). The Interim Strategy suggests that the World Bank will continue to be a significant channel for financing related the emergency preparedness.

##### **Inter-American Development Bank**

The IDB is a substantial source of multilateral development aid to Haiti. In 2010, the IDB cancelled Haiti's pending debt of US\$484 million; it disbursed around US\$355 million in grants in the two years following the 2010 earthquake.<sup>23</sup> The IDB and Norwegian Government co-financed a US\$34 million disaster mitigation project, which received US\$14 million from the Haiti Reconstruction Fund. The 2011–2015 Haiti country strategy identifies a series of risks and steps, including improving natural disaster prevention actions; specifically the IDB will invest in watershed management and construction codes (IDB, 2011). The IDB in general takes an integrated disaster risk management approach,<sup>24</sup> suggesting that future support to DRM will be wider than the activities cited in the country strategy and might include emergency preparedness measures.

<sup>19</sup> <http://www.ccrif.org/>

<sup>20</sup> <http://www.oas.org/dsd/Nat-Dis-Proj/Natdesproject/InterCommit.htm>

<sup>21</sup> <http://www.cdema.org>

<sup>22</sup> The research was not able to determine the extent to which these activities are taking place related to Haiti

<sup>23</sup> <http://www.iadb.org>

<sup>24</sup> <http://www.iadb.org/en/topics/natural-disasters/natural-disasters,1441.html#UkoCnNLIVxl>

## Strategies of major donors

The major donors to Haiti are the United States, the European Commission and Canada. The EC 2008–2013 Country Strategy for Haiti and description of CIDA focus areas<sup>25</sup> make no reference to disaster risk management, even though aid data suggests that both donors are funding these types of activities. The US Government's post-earthquake strategy focuses on four pillars – infrastructure and energy, food and economic security, health and other basic services, and governance and the rule of law. A specific emergency preparedness activity in the strategy is the development and publication of an emergency preparedness and response plan for the Haitian National Police, including the performance of a simulation to demonstrate operational capacity to respond to a major emergency. This is part of an overall objective to improve the capacity of the Police and their ability to provide public order and protect vulnerable populations (USG, 2011).

The humanitarian aid departments of the EC and US have both emphasised the importance of DRR within their approaches. In Haiti, the Office of US Foreign Disaster Assistance (OFDA) to DRR has been overwhelmingly in the form of programmes that integrate risk within disaster response, such as cholera prevention and reinforced shelters, as opposed to standalone DRR interventions. In 2011, US\$44 million of disaster assistance to Haiti integrated DRR; by contrast only US\$298,000 was for standalone DRR projects (USAID, 2011). OFDA's support to emergency preparedness was not established in the timeframe of this case study. The Humanitarian Aid and Civil Protection department of the European Commission (ECHO) has provided €25.9 million for DRR projects from 1998 to 2013 (ECHO, 2013). ECHO's financing to DRR in Haiti represented 6.6% of its total funding in 2010 and 8% in 2011; in 2013, €3.5 million will go to specific disaster preparedness projects. ECHO-funded DRR projects have included emergency preparedness, working in close collaboration with the National System of Disaster Risk Management and reinforcing government capacities to respond to emergencies (Ibid.).

## Findings

### Progress, but more institutionalisation needed

There has been significant progress in the GoH ownership of the DRR and preparedness agenda, and DRM is increasingly articulated as a key development and humanitarian priority. The GoH vision and leadership on this issue, however, need to be better institutionalised within the legal and bureaucratic system. At the national level, while there has been increasing support to the SNGRD, and recognition

of the critical role that the DPC in particular plays in response and preparedness, the latter still lacks legal status and therefore has no independent budget. At the same time, there is a need to strengthen the institutionalisation of preparedness at sector level.

### Coherence and commitment

Recognition of importance of preparedness is not yet mirrored by clear articulation of a preparedness vision or a coherent funding plan. While the national framework is becoming more consolidated, the general approach to funding preparedness is still fragmented across a multiplicity of mechanisms. There is still no coherent conceptual framework among international agencies for the range of interventions being undertaken on preparedness, and little coherence among donors. Some donors of humanitarian assistance said that preparedness is a priority, but underlined the perceived lack of commitment and coherence at an agency level. At the same time, agencies have said that the funding available for preparedness is limited, and the donors of development aid remain reluctant to fund preparedness programming, even when it involves long-term capacity building of national institutions. Humanitarian agencies are over-stretched and donors of development aid are filling the gap. Beyond stockpiling of relief items, warehouses, hardware and training, it is critical to invest in people, capacity and processes for the long term.

### Streamlining of preparedness financing

Beyond increasing the volume of funds, there is a need to finance preparedness more coherently within the CAED framework.

### Long term, but don't delay

The institutional reform process is very important, particularly regarding the legal status of the DPC and a dedicated budget. However, these are long-term processes and should not be preconditions for continuing nor, indeed, increasing funding. There have been significant improvements in the 'alert chain', but the system is still fragile and requires swift, flexible and sustained support. The DPC underlined the need for more *specialised* technical support, and this is still largely centralised. There is a need to extend and reinforce support to sub-national levels (departmental and communal).

### Sector preparedness

There is a need to support enhanced preparedness at the sector level. Agriculture (CSNA coordination on food security) and Health are positive examples, but preparedness in other sectors appears to be insufficient. Problems cited included a lack of resources and capacity, although the group has been effective in coordinating

<sup>25</sup> <http://www.acdi-cida.gc.ca>

partners. There remains a lack of capacity to track funding against appeals. Many ministries do not even have emergency preparedness mechanisms to coordinate a sector-based response, and this needs to be supported more systematically.

### Poverty and preparedness

In the wake of recent disasters, poverty rates have risen in both urban and rural areas, and poverty is one of the major challenges affecting people's ability to both prepare for and recover from disasters. Current investment in livelihood preparedness, however, remains low. Future emergency preparedness must include measures that not only strengthen the ability for national institutions to respond, but also increase access to timely support for people who are likely to be most affected by the impact of disasters and other emergencies. A range of tools, such as conditional cash transfers and index-based micro-insurance, can be explored further to enable people to access financial resources more easily following a disaster and to protect their assets. Both donors (such as the IDB) and the private sector (such as Digicel) are already exploring some of these mechanisms. Preparedness can be integrated into the development of these mechanisms, including the identification of vulnerable at-risk communities and the training of local communities in livelihood preparedness.

### National non-governmental partners

While there has been more engagement with national institutions, there is still a need to engage more effectively with the private sector and civil society active in emergency preparedness. While there is a need for more support for GoH capacity, it is also necessary to engage other key partners. These partners must be central to the transition process as they are key to ensuring the sustainability, inclusiveness and accountability of preparedness efforts. There are national platforms with well-defined structures and objectives, and they want more engagement, not just from the international community, but also from national stakeholders. The private sector wants clear memoranda of understanding with the GoH to guide the ways in which capacity will be used and paid for.

### Funding prospects for preparedness

Emergency preparedness and activities with emergency preparedness aspects integrated in their design have been supported through a wide variety of humanitarian and development financing channels. Humanitarian mechanisms that prioritise urgent humanitarian needs (e.g. Flash Appeals and CERF) are not likely sources for emergency preparedness funding. While traditionally focused on humanitarian activities, ECHO is a growing source of funding on emergency preparedness. The World Bank is and will remain a significant channel for funding for

emergency preparedness, mainly in the form of government capacity-building.

### Shock-proofing investments

The private sector recognises preparedness as key to economic development and particularly the improvement of the investment climate in Haiti. It was noted that Haiti is a privatised economy in which there is already much private activity (such as reconstruction through private financing) and that these networks and patterns needed to be better understood and harnessed.

### Accountability and public-private partnerships

Representatives from the private sector and civil society stressed the need for more accountability on where preparedness funding is going and how effective it is, and to be more engaged in emergency preparedness activities. In particular, national actors articulated a need for more transparent oversight of the Ministry of Finance's Emergency Fund. It was regarded as a potentially positive initiative, but in need of further clarity and accountability.

## Recommendations

### Rethinking humanitarian engagement in Haiti

Emergency preparedness in Haiti must be understood in a context of a transition of humanitarian coordination and capabilities from international to national agencies. There is a need for what the former Humanitarian Coordinator called a 'radical rethinking of the humanitarian enterprise' in a way that empowers Haitian actors, governmental and non-governmental, to take the lead. This requires a paradigm shift that puts preparedness, rather than response, at the centre of national and international priorities for disaster management. While much has been done in Haiti, there is a need for greater coherence in the way preparedness is articulated, programmed, financed, implemented and evaluated.

### Support for national preparedness vision and action plan

International partners should support the GoH in the development of a clear national vision of preparedness and an action plan that articulates national priorities, through a consultative process that engages a diverse range of Haitian actors, including the business sector and community-based organisations. This will provide a framework for the national actors and international partners to take stock of existing preparedness activities as well as levels and sources of funding, through the GoH's CAED, to identify gaps and conduct coordinated planning, implementation, and monitoring and evaluation.

### **Adopt a MTEF for the formulation of forward-looking preparedness budgeting**

While the inclusion of DRR and preparedness-related activities in Haiti's budget is positive, these remain focused on year-by-year activities and are insufficiently connected to medium- and long-term policy objectives. Introduction of a MTEF, as part of broader budget reform and public financial management efforts, should be supported to enable better linking of policy objectives to the allocation and expenditure of resources and stronger fiscal control of and accountability for preparedness, in line with the national vision and action plan. Off-budget donor funding for preparedness should correspond to the GoH's priorities as articulated and calculated through the implementation of the MTEF for budget formulation.

### **Encourage more on-budget and innovation emergency preparedness measures**

Donors should also be encouraged to channel more funds through the GoH, rather than through international agencies. With more on-budget contributions, additional innovative financing mechanisms could be explored, such as the compulsory allocation of a certain percentage of all on-budget aid to emergency preparedness.

### **Re-align, coordinate and maximise in-country pooled funding**

In-country pooled funds have been useful sources of financing for preparedness and DRR programmes. The ERRF is currently linked to the Cluster system and priorities. In line with the Cluster transition and transfer of capabilities to national actors, the ERRF's priorities should also be gradually re-aligned to reflect the emergency preparedness priorities of Haitian actors, particularly the GoH, while maintaining an objective overview of humanitarian needs. Similarly, the Haiti Reconstruction Fund has been an important source of funding for capacity building of DPC as well as broader DRR activities. As the Haiti Reconstruction Fund's mandate currently continues until 2017, it has the potential to remain an important mechanism for financing preparedness activities. Both the ERRF and Haiti Reconstruction Fund should be better coordinated to ensure complementarity in preparedness activities, and alignment to the GoH's priorities.

### **Mobilise development financing**

There is a need to place preparedness more firmly on the *development* agenda. There is growing recognition in Haiti that disaster preparedness is a critical part of building a stable foundation for sustainable development, whether in terms of food security, business continuity or environmental protection. There is also awareness that

institutional development and the building of preparedness capacities requires long-term financing. Currently, however, preparedness activities continue to be financed largely through humanitarian funding. If preparedness is to be taken seriously as part of the national development agenda, within broader approaches to DRR and strengthening resilience, it will require greater financing from development funds, national and external. As a mechanism to bring humanitarian and development donors together, Haiti could consider looking at successful models of DRR platforms, such as the Nepal Risk Reduction consortium. The Political Champions could support the creation of such a platform for Haiti and advocate for serious engagement and investment from humanitarian and development actors.

### **Develop a national public-private partnership platform for preparedness**

The Haitian private sector has shown itself to be an active, committed and innovative partner in emergency preparedness and should be more systematically engaged by the GoH and international agencies as a key partner on preparedness and DRR more generally. At the same time, the regional and international private sectors are increasingly engaged in Haiti and can be mobilised more strategically as partners in preparedness. In support of such an approach, the International Finance Corporation (IFC), for example, could convene a series of public-private dialogues on DRM, including preparedness. Engagement should go beyond coordination of activities among different actors to focus on the development of a national public-private partnership platform for preparedness. This would allow all parties to agree on a common set of priorities and on ways of working that complement and are mutually accountable, as well as possibilities to explore co-financing between the private and public sectors and international partners. The public and private sectors should also share expertise and build joint systems for monitoring results and ensuring accountability.

### **Bridge the humanitarian-development financing divide**

Given the initial critique of the international response, this is a potential opportunity to engage with and accompany national actors broadly and strategically. There is a need for a pragmatic dialogue with development actors in Haiti and at the global level. Haiti, as a resilience 'test lab', could lead a process of dialogue among humanitarian and development agencies in-country, led by the GoH with donors and humanitarian/development partners through the IASC, the GFDRR and the United Nations Office for Disaster Risk Reduction (UNISDR). Engagement with the private sector on preparedness could also be conducted through IFC, the World Economic Forum, the Clinton Foundation and regional business councils.

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## Annex 1. Summary of meeting schedule in Haiti, 14–22 January 2013

### Monday January, 14 2013

14:00	Arrival at the AIRPORT Pick up by OCHA and transfer to LogBase
15:00 – 16:00	Meeting with Viviana De Annuntiis OCHA LogBase, Coordination Unit
16:00 – 17:00	Security Orientation briefing UN SECURITY Camp Delta

### Tuesday January 15, 2013

08:30 – 10:30	Meeting with Frits Ohler and Adam Yao FAO FAO Office
12:00 – 13:00	Meeting with Rebecca Pankhurst Chief of Emergency Branch, UNICEF OCHA Office
14:00 – 15:30	PRU working group OCHA Office
15:30 – 16:30	Bilateral meetings with PRU Working Group

### Wednesday January 16, 2013

09:00 – 12:00	National Event on Seismic Risk Champ de Mars (Kiosque Oxyde Jeanty) : Inauguration of the exhibition 'Sustainable engagement on the path to seismic security' by HE Michel J. Martelly, President of the Republic 11h00 – 12h00 Palais national : official presentation of the 'Road map to reducing seismic risk in Haiti', chaired by HE Laurent Salvador
13:00 – 14:30	Meeting with Gilles Damais and Peter Sollis IDB IDB Office
15:30 – 16:30	Meeting with Thomas Pitaud UNDP UNDP Office, Juvenat

### Thursday, January 17, 2013

08:30 – 09:30	Meeting with Nigel Fisher DSRSG/RC/HC DSRSG Office
11:00 – 12:30	Meeting with Daniel Urena, ECHO ECHO Office
14:30 – 15:30	Meeting with Gaetano Givo World Bank Office
16:30 – 17:30	Meeting with Getro Mathieu PONT SCH OCHA Office
18:00 – 19:30	Meeting with Giovanni Cassani CCCM – E Shelter Cluster Coordinator

### Friday January 18, 2013

08:30 – 09:00	Meeting with MINUSTAH U3 (Operations) CAMP DELTA
09:00 – 10:00	Meeting with Andrew Kent USAID – OFDA US Embassy
10:00 – 10:30	Meeting with Captain James Pontiff and CDR Richter Tipton US Embassy MLOs and US Embassy Military Defense Attaché US Embassy
11:30 – 12:30	Meeting with CIDA Canadian Embassy
13:30 – 15:00	Meeting with Johan Peleman/EPR unit OCHA OCHA office
16:00 – 17:00	Meeting with Fenella Frost UNDP Hotel Montana

### Sunday January 20, 2013

20:00 – 21:00	Rubem Cesar Fernandes Executive Director Viva Rio
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### Monday January 21, 2013

08:30 – 09:30	Meeting with Marie-Louise Augustin Russo General Director – AGERCA AGERCA Office
11:30 – 12:30	Meeting with M. Gary Mathieu Director CNSA CNSA
14:00 – 15:00	Meeting with Alta Jean Baptiste and Abel Nazer DPC and SPGRD COUN, Delmas2
16:00 – 16:30	Meeting with the Mayor of Tabarre Municipality of Tabarre
17:00 – 18:00	Meeting with Bryan Gonzalez, DIGICEL OCHA Office

### Tuesday January 22, 2013

08:00 – 8:30	Meeting with Myrta Kaulard WFP Director OCHA Office
09:30 – 11:00	HCT meeting OCHA Office
11:00 – 12:00	Round up and Conclusions DSRSG/HC/RC, ODI Mission and OCHA OCHA Office

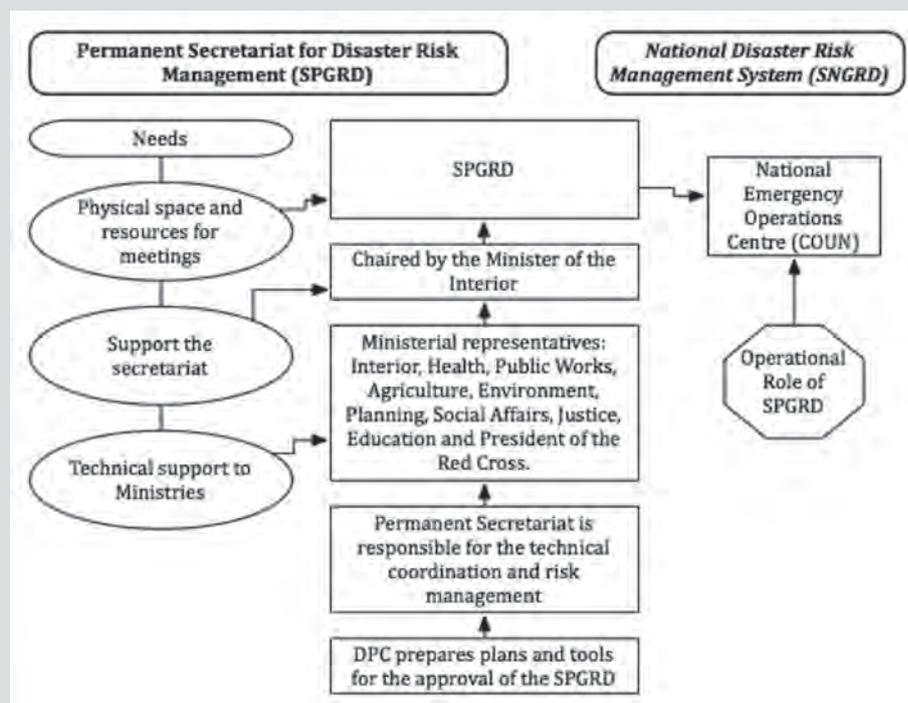
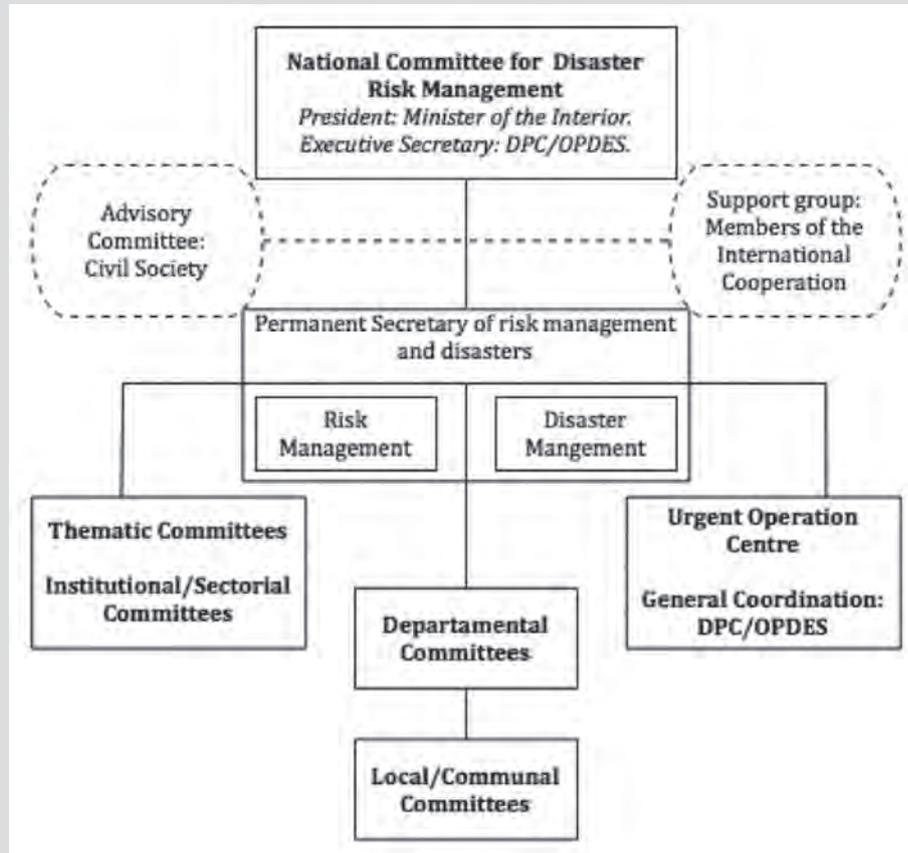
## Annex 2. Time-line of emergencies in Haiti 1994–2012

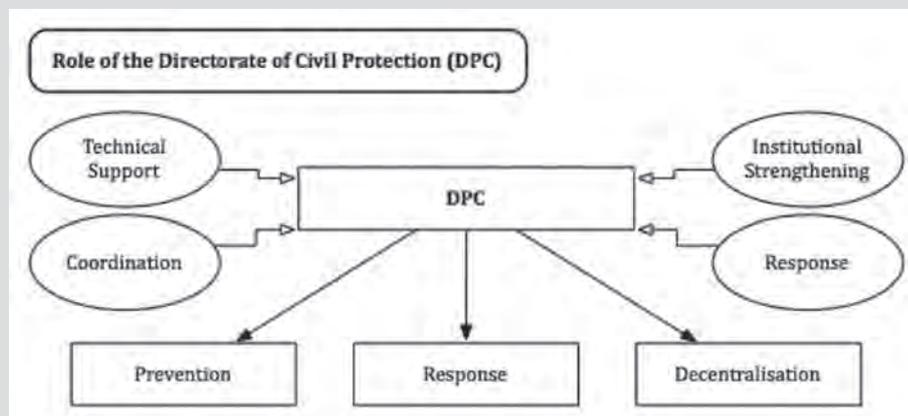
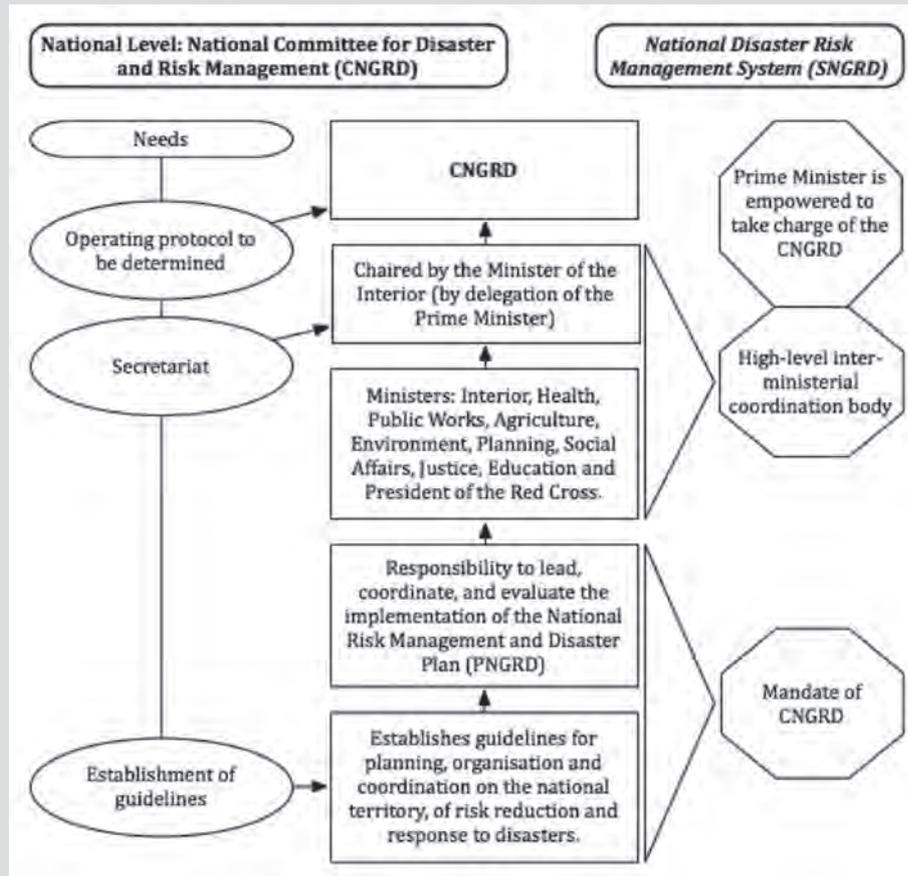
Date	Type of hazard	Description	Location	Population affected
28 October 2012	Hurricane	Heavy rains, strong winds and flooding associated with Hurricane Sandy in late October 2012 killed 54 people and damaged or destroyed tens of thousands of houses and infrastructure, such as roads and bridges	The four southern departments of Grand'Anse, Nippes, South, and Southeast. Southern peninsula and Ouest Department, which encompasses metropolitan Port-au-Prince	54 deaths, 200,000 homeless; 27,701 houses damaged or destroyed; 39,058 families affected; 90,356 ha of crops damaged or destroyed; 19,000 people evacuated to temporary shelters
25 August 2012		Tropical Storm Isaac damaged food and economic security		
5 November 2010	Hurricane Thomas	Kills at least 10 causing damage and worsening the cholera epidemic		At least 10 people killed
20 October 2010	Cholera epidemic	Cholera epidemic breaks in Central Haiti	Began in Artibonite and spread to other departments, including Ouest (Port-au-Prince)	At least 3,597 killed, over 340,000 became ill
20 January 2010	Earthquake	Earthquake magnitude 6.1 occurred at 06:03	Epicentre approximately 59 km west of Port-au-Prince and at least 10 km beneath the surface	
1 December 2010	Earthquake	Earthquake magnitude 7.0 occurred at 16:53. A dozen secondary shocks ranging from 5.0 to 5.9 registered	Epicentre near the Leogane (Ouest Department approximately 25 km from Port-au-Prince)	Killed between 46,000 and 316,000 and displaced an estimated 1.3 million
20 October 2009	Flood	Heavy rain Port-au-Prince and its suburbs. Carrefour, in the southern suburbs, completely flooded	Port-au-Prince and its suburbs, including Carrefour	
6 September 2008	Hurricane	Hurricane Ike, category 4, grazed the western coastline of Haiti, leading to heavy rain in Nord, Ouest and Nord-Ouest departments	Western coastline	
1 September 2008	Hurricane	Hurricane Hanna ravaged the Artibonite and Nord-Est departments. Several towns flooded, including Gonaïves. Several towns in Jacmel, Nord-Est, Sud and Sud-Est flooded	Artibonite and Nord-Est departments	One death confirmed and Gonaïves and several towns in Jacmel, Nord-Est, Sud and Sud-Est flooded
26 August 2008	Hurricane	Hurricane Gustav crosses the south peninsula	Crosses the south peninsula, including the Sud and Grand'Anse departments	About 77 deaths and 8 disappearances and serious destruction. 15,000 families affected by the storm, which destroyed 3,000 houses and damaged 11,458
16 August 2008	Storm	Tropical Storm Fay crossed the entire country	Country	
5 August 2007	Torrential rain	Torrential rain, causing major damage in several regions, in particular in the Nord, Nord-Est and Sud departments. Ouanaminthe hard hit and the bridge between Ouanaminthe and Dajabón linking Haiti to the Dominican Republic severely damaged	the Nord, Nord-Est and Sud départements	Causing considerable damage in several regions of the country

Date	Type of hazard	Description	Location	Population affected
17 March 2007	Flood and storm	Floods caused by rain and storms hit a large part of Haiti for over a week	Grand'Anse: Jérémie, Abricots, Bonbon, Les Irois Sud-Est: Jacmel Ouest: Cité Soleil, Delmas, Port-au-Prince (Carrefour-Feuilles, Canapé Vert) Nord-Ouest: Port-de-Paix, Saint-Louis du Nord, Anse-à-Foleur Nord: Cap-Haïtien Nord-Est: Ferrier, Ouanaminthe.	Six departments badly affected
22 November 2006	Flood	Heavy rain caused flooding in Grand'Anse, Nippes and Nord-Ouest departments	in Grand'Anse Department and the Nippes and Nord-Ouest departments	Damage to roads including the collapse of a bridge across Ravine Sable at Trou-Bonbon
25 October 2005	Flood	Flooding caused by torrential rain hit many parts of the Nord-Ouest, particularly settlements of Port-de-Paix, Bassin-Bleu, Anse-à-Foleur and Saint-Louis du Nord.	Many parts of the Nord-Ouest department	
23 October 2005	Storm	Tropical Storm Alpha crossed south peninsula, affecting departments of Grand'Anse and Nippes	Departments of Grand'Anse and Nippes	
17 October 2005	Hurricane	Hurricane Wilma struck west and south of Haiti.	West and south	
10 April 2005	Flood	Floods in several parts of the country, including Pétion-Ville and Grand-Goâve in Ouest department, where the high water caused considerable loss of property. The government did not make a final accounting of this catastrophe.	Pétion-Ville and Grand-Goâve in the Ouest département,	Considerable loss of property
6/7 July 2005	Hurricane	Hurricane Dennis touched south-east coast, causing flooding in Sud (Bainet, Grand-Goâve, Les Cayes)	South-east coast of Sud (Bainet, Grand-Goâve, Les Cayes)	More than 500 homeless
18/19 September 2004	Hurricane and flood	Hurricane Jeanne crossed western Haiti and Artibonite, causing flooding	Western Haiti the Artibonite	1,870 dead, 2,620 injured, 846 disappeared and 300,000 displaced, with more than 3,000 dead, Gonaïves worst affected city
10 September 2004	Hurricane	Hurricane Ivan struck southern peninsula and west coast, causing serious damage due to flooding	Southern peninsula and west coast	Serious damage in several areas
23 May 2004	Torrential rain	Torrential rains pounded south-east during the night. Mapou Belle-Anse with 432 dead, Bodary with 350 dead and Fonds-Verrettes with 237 victims, all in the Sud-Est department, worst hit. The interim government of Boniface and Latortue declared 28 May a day of national mourning.	South-east	1,232 dead, 1,443 disappearances and 31,130 displaced persons

Date	Type of hazard	Description	Location	Population affected
24 May 2002	Flooding & Tropical Storm	Flooding on the southern peninsula, town of Camp Perrin and settlements of L'Asile and Anse-à-Veau worst affected by tropical storms. 31 dead, 14 disappeared and more than 7,000 displaced in the Sud department	Southern peninsula, town of Camp Perrin and settlements of L'Asile and Anse-à-Veau	31 dead, 14 disappeared and more than 7,000 displaced
23 September 1998	Hurricane	Hurricane Georges devastated Sud-Est and Nord-Ouest departments	Sud-Est and Nord-Ouest departments	147 dead, 34 serious injuries, 40 disappearances, and 167,500 displaced
11 December 1994	Hurricane	Hurricane Gordon crossed Sud-Est department and the southern peninsula, causing flooding	Sud-Est department and the southern peninsula	Approximately 2,000 deaths and disappearances

### Annex 3. Haiti's national disaster response system





# Annex 4. Maps of Haiti

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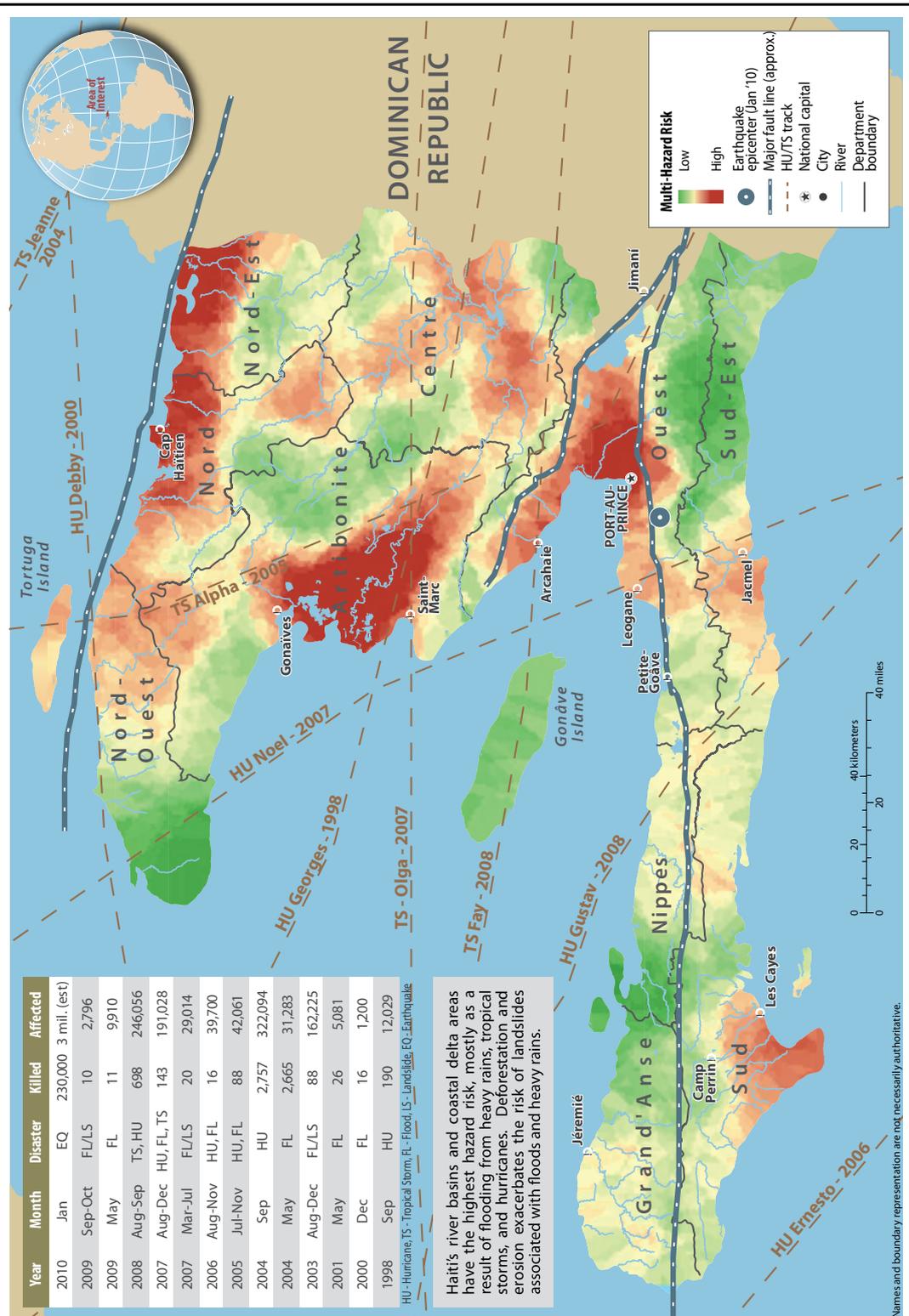
## Haiti: Multi-Hazard Risk, Major Disasters and Severity (1998 - 2010)

**HIU** U.S. Department of State  
[hiu\\_info@state.gov](http://hiu.state.gov)  
<http://hiu.state.gov>  
 HUMANITARIAN INFORMATION UNIT

Year	Month	Disaster	Killed	Affected
2010	Jan	EQ	230,000	3 mil. (est)
2009	Sep-Oct	FL/LS	10	2,796
2009	May	FL	11	9,910
2008	Aug-Sep	TS, HU	698	246,056
2007	Aug-Dec	HU, FL, TS	143	191,028
2007	Mar-Jul	FL/LS	20	29,014
2006	Aug-Nov	HU, FL	16	39,700
2005	Jul-Nov	HU, FL	88	42,061
2004	Sep	HU	2,757	322,094
2004	May	FL	2,665	31,283
2003	Aug-Dec	FL/LS	88	162,225
2001	May	FL	26	5,081
2000	Dec	FL	16	1,200
1998	Sep	HU	190	12,029

HU - Hurricane; TS - Tropical Storm; FL - Flood; LS - Landslide; EQ - Earthquake

Haiti's river basins and coastal delta areas have the highest hazard risk, mostly as a result of flooding from heavy rains, tropical storms, and hurricanes. Deforestation and erosion exacerbates the risk of landslides associated with floods and heavy rains.

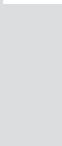


Names and boundary representation are not necessarily authoritative.

UNCLASSIFIED  
 Sources: EM-DAT: The OFDA/CRED International Disaster Database (2010); UNEP/UNDP/UN-ISDR/World Bank 2009 Global Risk Data Platform  
 February 23, 2010 - UJ 39 2-10 STATE HIU



**HAITI: Cholera snapshot** (published on 06 May 2013)



Despite the decline in new cholera cases, the level of infections remains very high.

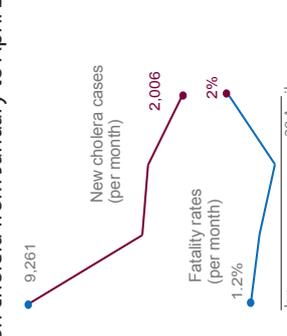


**1 Current information on cholera from January to April 2013.**

**18,756**  
Cumulative cholera cases  
January - April 2013

**190**  
Number of deaths  
Jan - April 2013

**1%**  
Fatality  
Jan-Apr 2013

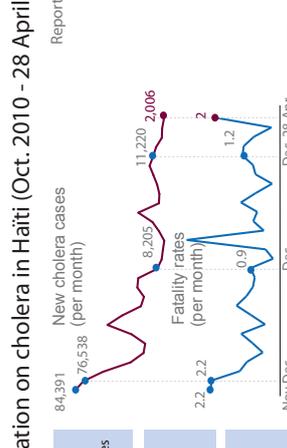


**2 General information on cholera in Haiti (Oct. 2010 - 28 April 2013)**

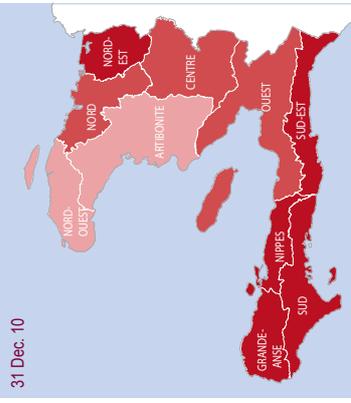
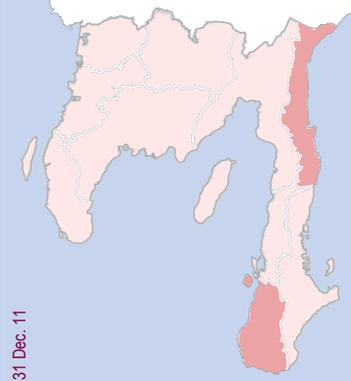
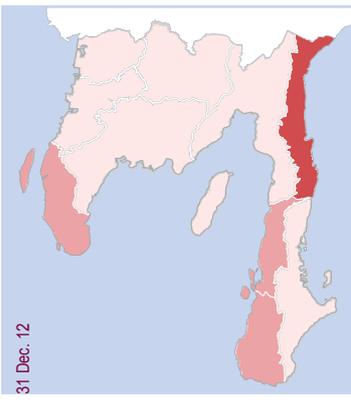
**654,736**  
Cumulative cholera cases  
(Oct. 10 - 28 Apr. 13)

**8,102**  
Number of deaths  
(Oct. 10 - 28 Apr. 13)

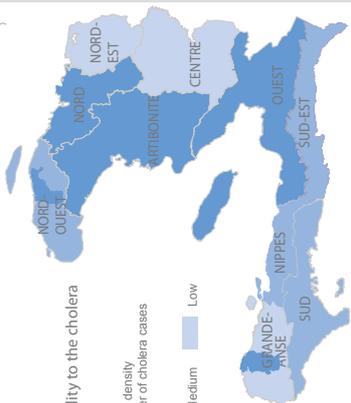
**1.2%**  
Fatality



**3 Evolution of the cholera epidemic using the fatality rate as a criterion**  
(In epidemiology, a case fatality rate (CFR) — or case fatality rate is the proportion of deaths within a designated population of "cases" (people with a medical condition), over the course of the disease. A CFR is conventionally expressed as a percentage and represents a measure of risk.)

**Analysis of the vulnerability to the cholera outbreak in Haiti**  
Based on flood risk, areas, density of IDPs, population, number of cholera cases and deaths

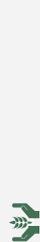


Update date: 03 May 2013 Sources: OMS/OPS, MSFP, WASH Cluster, Health Cluster. Feedback: ocha.haiti.in@gmail.com www.reliefweb.int http://haiti.humanitarianresponse.info  
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

**Haiti: Food Security and Nutrition Snapshot** (as of April 2013)

15% (1.52 million people) in 2012 against 8% (800,000 people) in 2011 face severe food insecurity at national level. 5.1% of children under five face acute malnutrition.

**Key Figures**



6.7 million people face food insecurity in Haiti

5.2 million people face moderate food insecurity in Haiti

1.5 million people face severe food insecurity in Haiti

Disaggregated data:  
792,568 (52%)  
731,601 (48%)

Rural: 4.1 million

Urban: 2.6 million

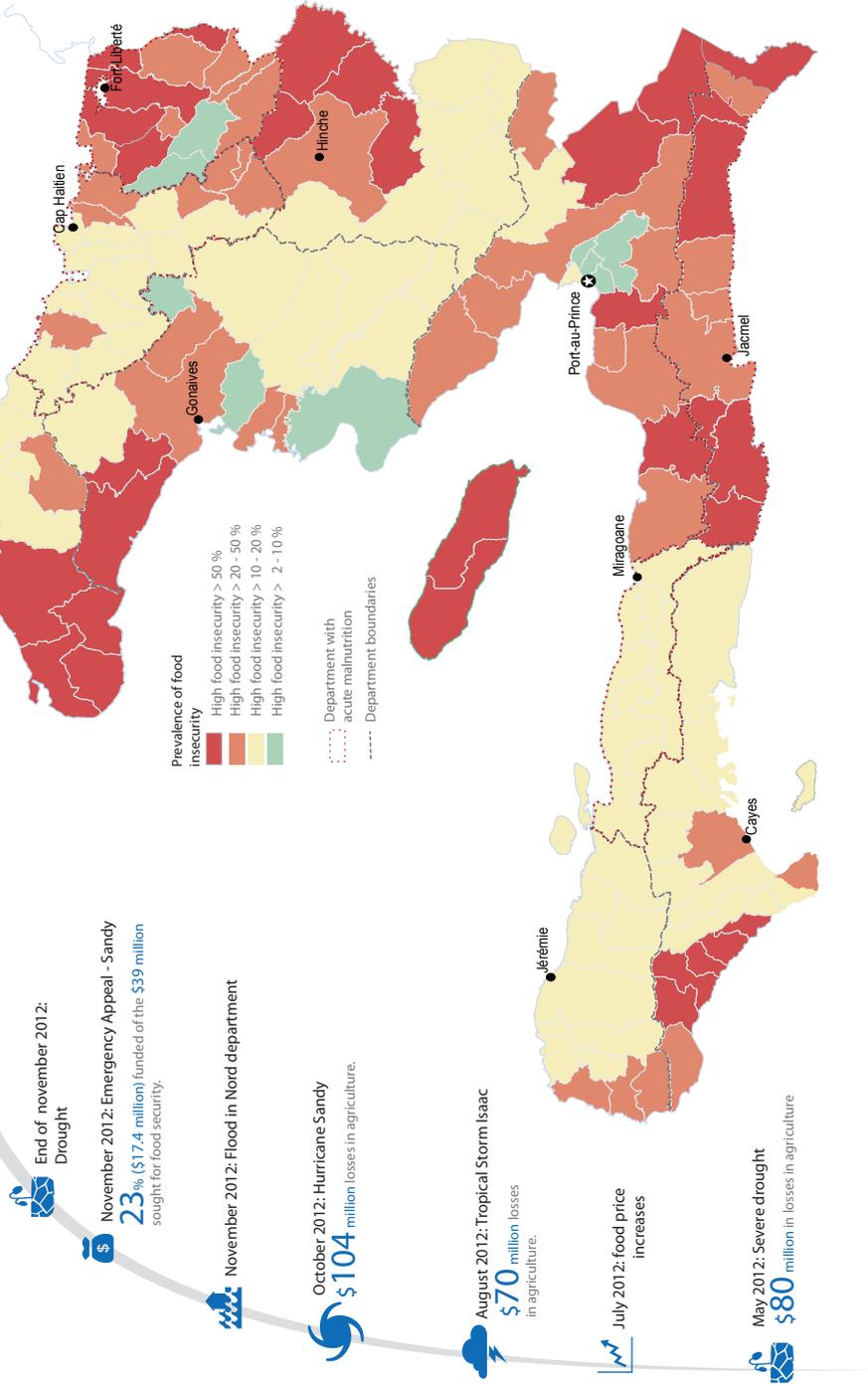


81,600 Children under five with acute malnutrition

61,200 (4%) Children under five with Moderate Acute Malnutrition (MAM)

20,400 (1.1%) Children under five with Severe Acute Malnutrition (SAM)

**Overview**



**Key Figures**  
**700,000** beneficiaries reached through post-Sandy response.  
**800,000** people still in need.

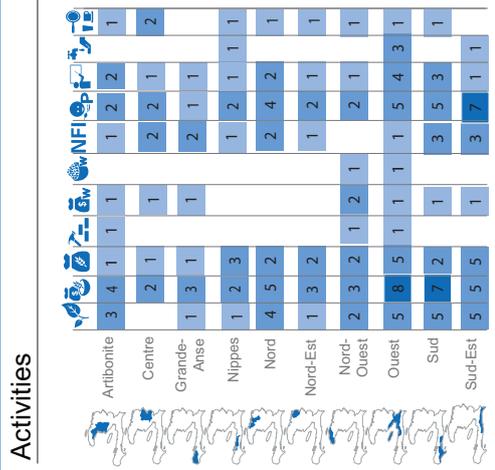
**Funding** m=million USD

	Requested	Funded
GOV(LFAES+MARNDR)	8,951,953	
USAID	15,243,550	
ECHO	9,065,000	
DFID	5,058,623	

**Partners**

Depart.	#partners
Artibonite	4
Centre	3
Grande-Anse	5
Nippes	3
Nord	6
Nord-Est	4
Nord-Ouest	6
Ouest	16
Sud	10
Sud-Est	9

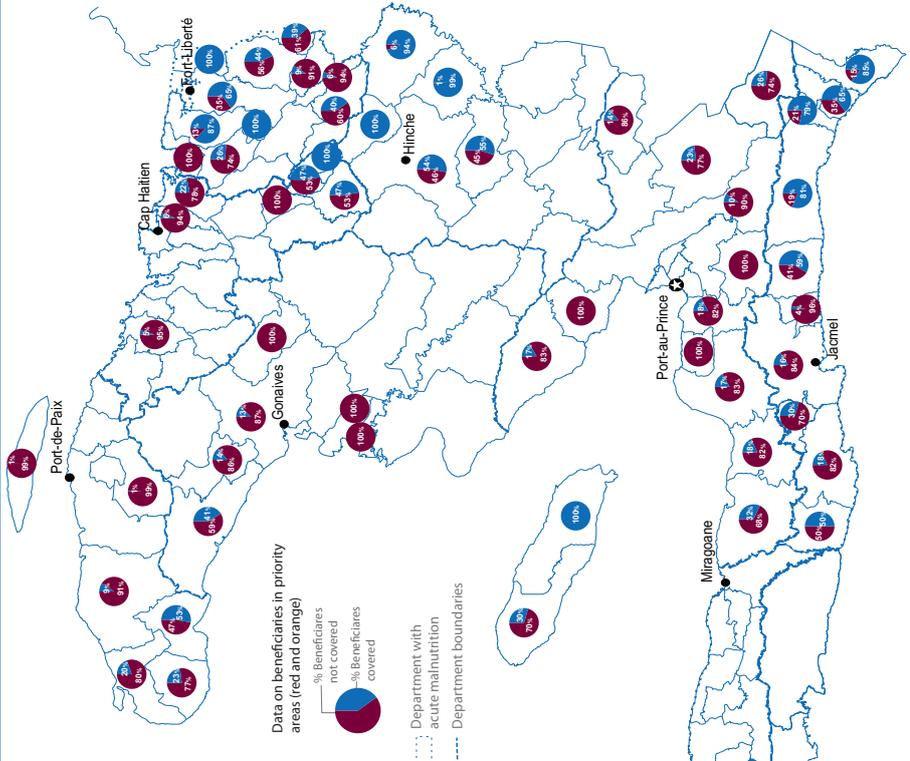
**38** partners



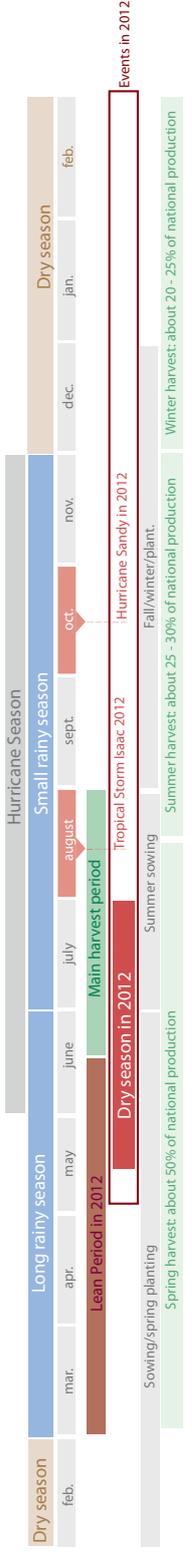
Number of partners: 1 (light blue), 2-5 (medium blue), 6-10 (dark blue), > 10 (darkest blue)

**Key of activities**

- Environment
- Cholera prevention/WASH
- Food for Work
- Cash for Work / voucher for work
- Food distribution
- NFI Distribution of seeds, farm tools, and fertilizers
- Capacity building
- Nutrition/health Projects
- Construction/rehabilitation
- Livelihood
- School feeding/ food rations



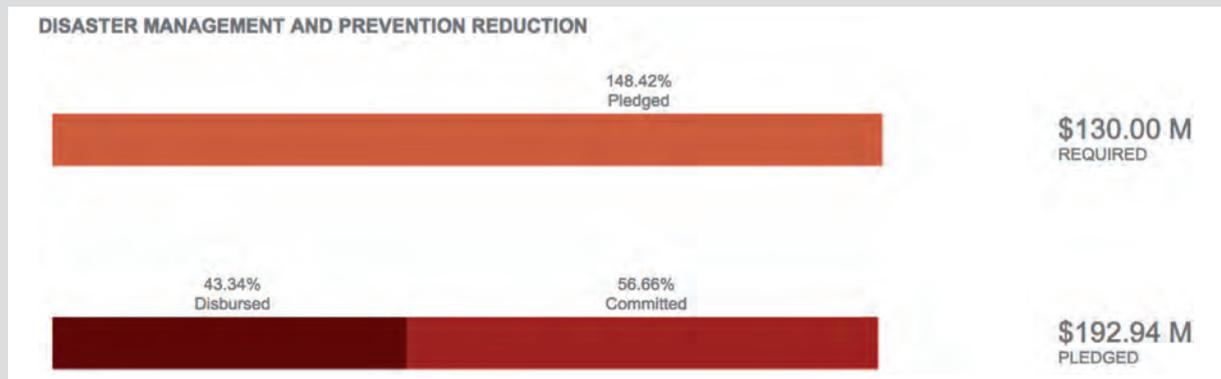
**Agricultural calendar including rainy and hurricane seasons**



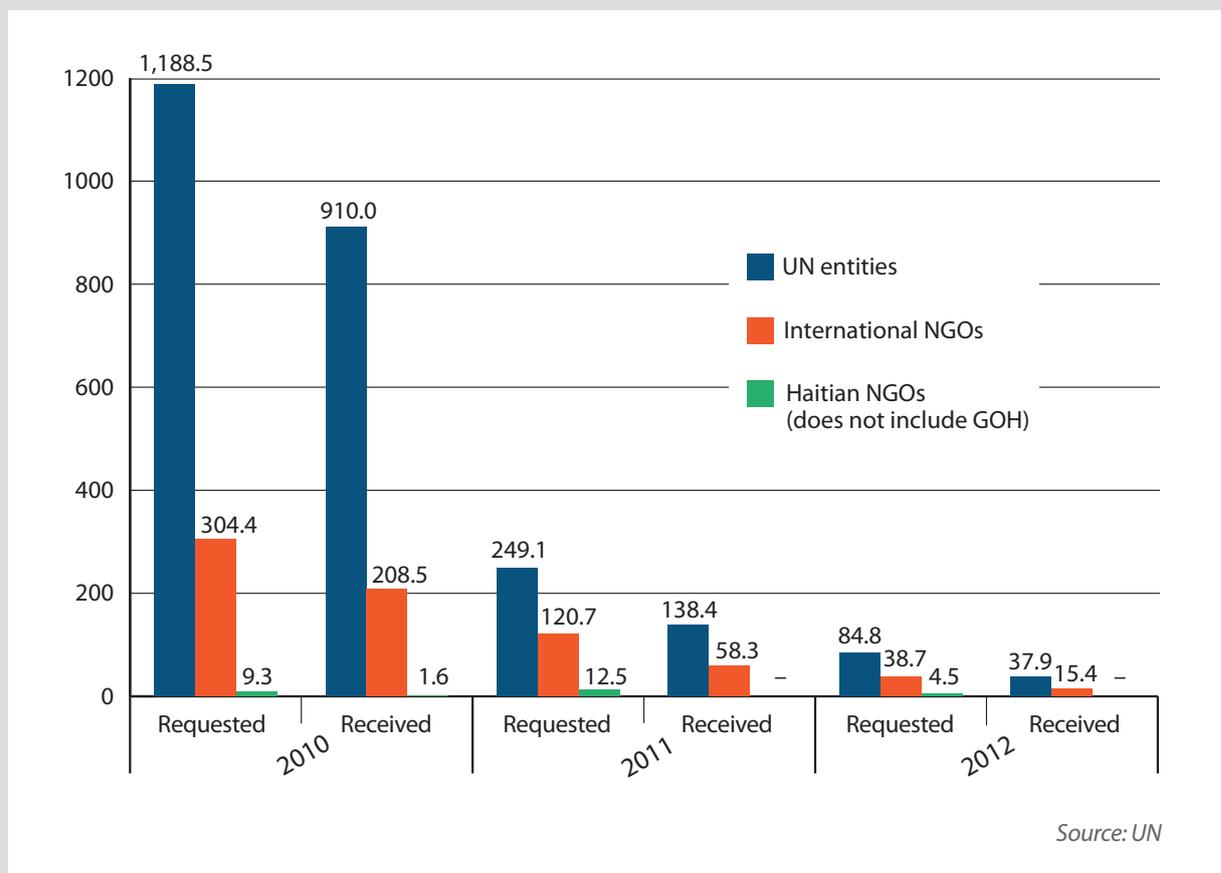
## Annex 5. Overall funding in Haiti

Source: Office of the UN Secretary-General's Special Adviser, available at:  
<http://www.lessonsfromhaiti.org/assistance-tracker/#/sectorAnalysis>

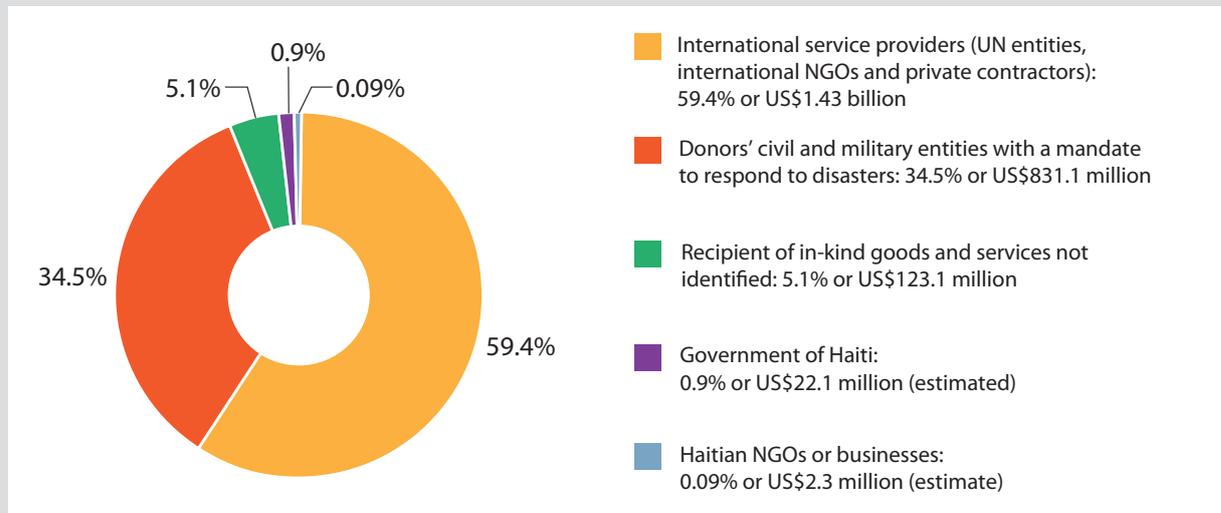
### OSE Report



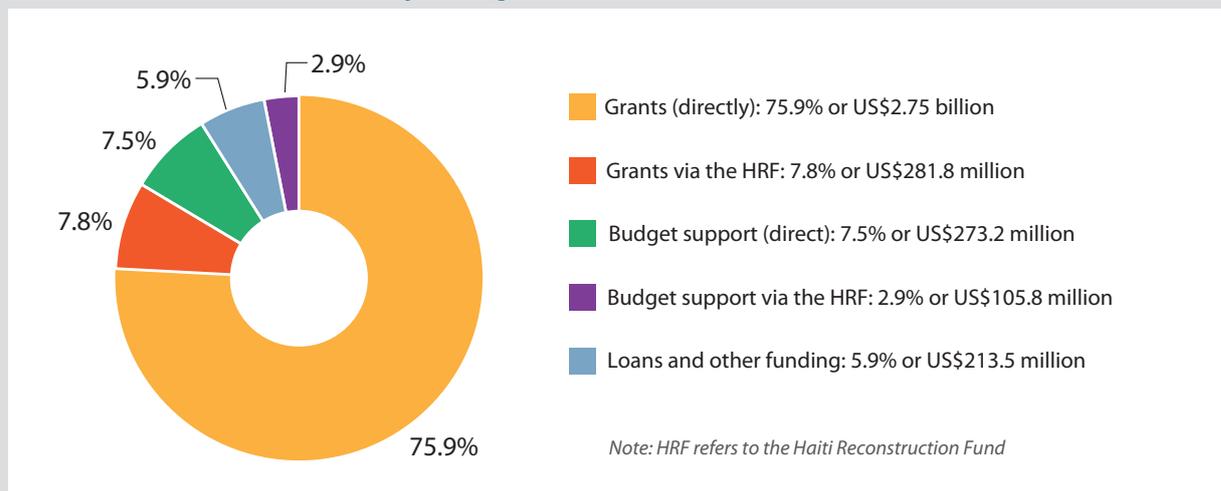
### Humanitarian funding requested and received for the UN humanitarian appeals from 2010 to 2012 (in US\$ millions)



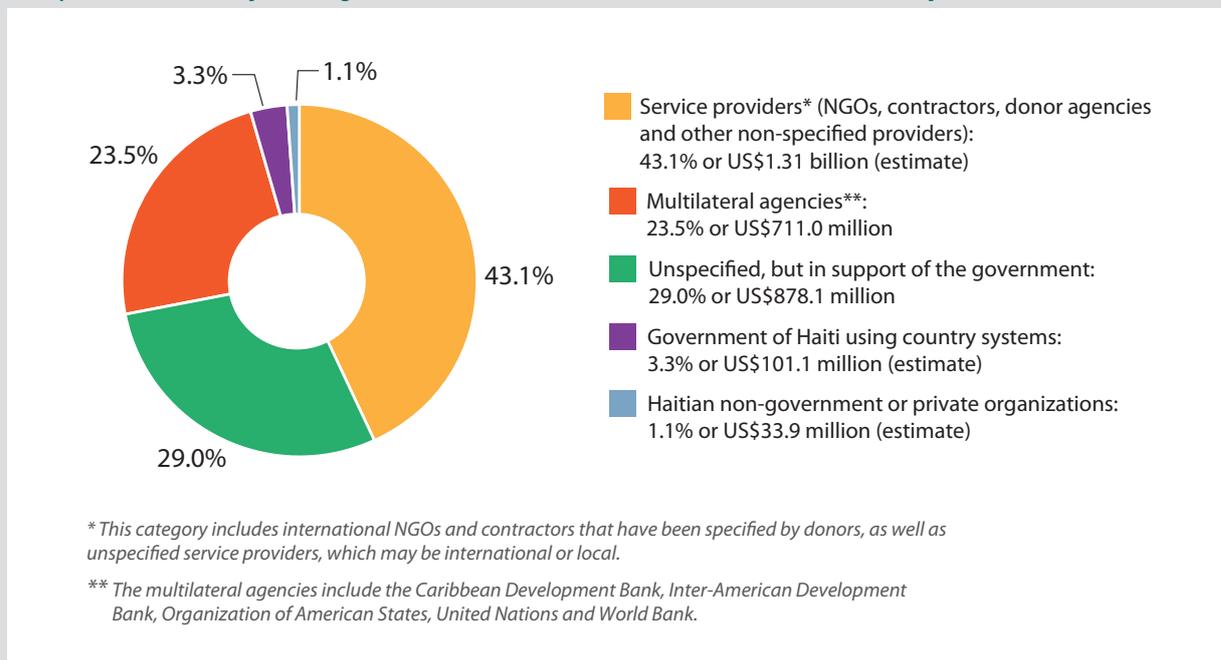
### Estimates of humanitarian funding from bilateral and multilateral donors by recipient (January 2010 to June 2012)



### Modalities used to channel recovery funding from 2010 to 2012



### Recipients of recovery funding from bilateral and multilateral donors from January 2010 to June 2012



## Annex 6. Analysis of projects and programmes against categories of emergency preparedness

### Emergency preparedness: a definition

The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards (including conflict and epidemics).

This entails readiness measures (risk assessment, contingency planning, stockpiling of equipment and supplies, training, community drills and exercises) and institutional preparedness (coordination arrangements, early warning systems, public education) supported by legal and budgetary frameworks.

Source: ODI Inception Report, November 2012

Preparedness matrix: categories of emergency preparedness (Colours relate to the colour coding in the table below.)	
Hazard/risk analysis and early warning	<ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard/Risk analysis</li> </ul>
Institutional and legislative frameworks	<ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>
Resource allocation and funding	<ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>• Government coordination mechanisms</li> <li>• National/sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster/sector established contextual standards</li> </ul>
Information management and communication	<ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster/sector information management systems – GIS, 3/4Ws</li> </ul>
Contingency / preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness</li> <li>• Contingency/preparedness and response planning</li> </ul>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and/or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>
Emergency services / standby arrangements and prepositioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>

Category of emergency preparedness				Date	Actor/activity	Funding for emergency preparedness activities	Funding status
				28/2/11 – Ongoing	UNDG HRF – IOM. Capacity Building in Disaster Risk Management. <a href="#">00077386</a> UNDG/HRF-4 – IOM. Capacity building in Disaster Risk Management: Construction/repair of hurricane shelters, training in DRR and DRM.	US\$ 1,980,000 (out of a total of 11,840,400 for HRF DRR Programme)	Fully disbursed
				10/6/11 – Ongoing	UNDG HRF – UNDP – UNDP (MDTF/PUNO only). Plan de Prevention <a href="#">00079112</a>	US\$ 9,860,400 (of a total of US\$11,840,400 for HRF DRR Programme)	28.6% disbursed
				31/12/08 Closed	Peacebuilding Fund – UNDP (MDTF/PUNO only). Security reinforcement of Port-au-Prince prison. <a href="#">00066701</a>	US\$ 800,000	91.7% disbursed
				16/12/09 Ongoing	MDG Achievement Fund – Multiple Organisations. Institutional Capacity Building and Local Community Empowerment for conflict prevention and social cohesion. <a href="#">00073337</a>	US\$ 7,000,000	71.5% disbursed
				25/01/11 Ongoing	UNDG HRF – Multiple. Vulnerability reduction of populations and infrastructure in the Southern Department. <a href="#">00077387</a>	US\$ 7,920,000	99.4% disbursed
				25/3/11 – Ongoing	UNDG HRF – Multiple. Haiti Southwest Sustainable Development Project <a href="#">00077735</a>	US\$ 7,920,000	99% disbursed
				8/3/10 – Closed	Peacebuilding Fund – UNDP – UNDP (MDTF/PUNO only). Mobile Cholera Outreach Project <a href="#">00074422</a>	US\$ 3,000,000	99.2% disbursed
				19/10/10 – 30/06/13	GFDRR Safe Hospital Reconstruction in Haiti [202153] To ensure health infrastructure in Haiti is disaster resilient	£955,000	Fully disbursed
				13/05/10 – 31/03/11	DFID. Haiti Disaster Risk Reduction Secondment of Contingency Planner to OCHA [201808]. To integrate DRR in post-earthquake reconstruction to reduce future disaster losses in Haiti	£84,465	Fully disbursed
				6/7/10 – 30/11/11	DFID. Acted: Structural Damage Assessment and Housing Repairs in Haiti [201970]. To Integrate DRR in post-earthquake reconstruction to reduce future disaster losses in Haiti	£873,101	Fully disbursed
				2010 – 2012	EC. Disaster preparedness and crisis response. Support for the directorate general for civil protection, reinforcing the fire brigade, involving the population in a partnership with the local and national media	€15,000,000	78.7% disbursed
				2010 – 2013	EC. Strengthen capacities of CNIGS	€3,500,000	22.9% disbursed
				07/2011 – 12/2011	20. FAO Provision of emergency support and strengthening national capacity to coordinate, be prepared for and respond to emergency situations in the agricultural sector in Haiti. HTI-11/A/39431/R	US\$ 825,000	Unmet
				07/2011 – 12/2011	21. FAO DDR, environmental protection and support to coping mechanisms through the support of livelihoods to vulnerable households affected by the earthquake. HTI-11/A/39432/R	US\$ 2,000,000	33% disbursed
				07/2011 – 12/2011	30. AMECON 2000 CHOLERA RESPONSE / Awareness and actions to protect farmers in the Central Plateau against the outbreak of cholera. HTI-11/A/40093/R	US\$ 417,000	Unmet
				11/2010 – 01/2011	31. PADIH CHOLERA RESPONSE / Awareness and actions to protect people and farmers in Artibonite against the cholera epidemic. HTI-11/A/40340/R	US\$ 185,000	Unmet
				01/2010 – 12/2011	40. WHO Emergency Preparedness and Response Capacity of the Health Sector. HTI-11/CSS/37712/R	US\$ 283,550	Unmet

Category of emergency preparedness	Date	Actor/activity	Funding for emergency preparedness activities	Funding status
	12/2010 – 12/2011	51. WFP Logistics Augmentation (Transport and Storage) and Cluster Coordination. HTI-11/CSS/39069/R	US\$ 8,000,000	Fully disbursed (123%)
	01/2011 – 12/2011	56. ALL HANDS VOLUNTEERS Leogane CASEC Capacity Building and DRR [WITHDRAWN]. HTI-11/CSS/39277/R	US\$ 348,000	Withdrawn
	01/2011 – 12/2011	66. OHCHR Increase capacity of national actors to respond to immediate protection needs of earthquake-affected population HTI-11/CSS/40177/R	US\$ 670,090	43% disbursed
	01/2011 – 03/2011	110. UNOPS Building assessments and management, analysis and dissemination of information available in the national infrastructure database for improved early recovery response [WITHDRAWN] HTI-11/ER/39482/R	US\$ 733,271	Withdrawn
	01/2011 – 12/2011	135. OUTREACH INTERNATIONAL Intensive Teacher Training in DRR, Pedagogical Methods and Gender Awareness [WITHDRAWN] HTI-11/E/38104/R	US\$ 221,320	Withdrawn
	01/2011 – 06/2011	137. ARBEITER-SAMARITER-BUND DEUTSCHLAND E.V (ASB) DRR Education in Schools and Communities in Petit-Goave [WITHDRAWN] HTI-11/E/38246/R	US\$ 249,395	Withdrawn
	01/2011 – 12/2011	143. UNESCO Enhancing disaster preparedness at community level through education in four coastal communities [WITHDRAWN] HTI-11/E/39486/R	US\$ 503,000	Withdrawn
	07/2011 – 12/2011	147. WVI Enhancing Children's Participation in DRR. HTI-11/E/42269/R	US\$ 723,000	Unmet
	08/2011 – 12/2011	148. ACT/FCA Cholera prevention in schools, Les Palmes Region. HTI-11/E/42272/R	US\$ 300,000	Unmet
	05/2011 – 04/2012	URAMEL Prise en charge et accompagnement post désastre en Haïti. Approche pluridisciplinaire & intégrée médico-légale et psychosociale. HTI-11/H/38700/R	US\$ 1,036,038	Unmet
	01/2011 – 12/2011	IOM Improving access to preventive public health information and linking communities with service providers aimed at returning/resettling and camp populations. HTI-11/H/38923/R	US\$ 798,000	Fully Disbursed
	4/2010 – 12/2011	MERLIN Providing Primary Health services, including cholera treatment and prevention services in Port-au-Prince. HTI-11/H/39477/R	US\$ 650,000	66% disbursed
	04/2010 – 12/2011	MERLIN Providing Primary Health Services including cholera treatment and prevention services in Petit Goave and Grand Goave HTI-11/H/39480/R	US\$ 620,000	69% Disbursed
	01/2011 – 12/2011	SC. Reduction of infant, child and maternal mortality and morbidity through prevention and treatment of acute malnutrition in Haiti HTI-11/H/39500/R	US\$ 642,218	Fully disbursed (159%)
	12/2010 – 08/2011	PAH CHOLERA RESPONSE / Strengthening of 5 Haitian departments aimed at improving the availability and management of cholera-related pharmaceuticals and disposables HTI-11/H/40298/R	US\$ 499,262	Unmet
	10/2010 – 05/2011	CHOLERA RESPONSE / CARE Haiti: Emergency Cholera Awareness, Prevention and Response Initiatives in Earthquake and Cholera-Affected Areas of Haiti. HTI-11/H/40301/R	US\$ 985,481	Fully disbursed
	06/2011 – 09/2011	OEDH CHOLERA RESPONSE / Formation, Sensibilisation et Distribution de kits hygiéniques aux gens contre le cholera. HTI-11/H/40331/R	US\$ 63,000	Unmet

Category of emergency preparedness			Date	Actor/activity	Funding for emergency preparedness activities	Funding status
			06/2011 – 12/2011	FHED–INC Cholera Prevention and Reduction in Bristout & Bobin Camps Peguy-Ville, Port-Au-Prince. HTI-11/H/40375/R	US\$ 220,000	Unmet
			11/2010 – 11/2011	UNFPA CHOLERA RESPONSE / Reinforcing Reproductive Health Care Services to Diminish the Impact of Hurricane Tomas in the spread of cholera and its effects on pregnant women, PMTC and PLWHIV [WITHDRAWN] HTI-11/H/40379/R	US\$ 11,206,800	Withdrawn
			01/2011 – 12/2011	ACF Renforcement de la capacité individuelle et communautaire à répondre aux catastrophes naturelles [WITHDRAWN]. HTI-11/P-HR-RL/38940/R	US\$ 675,000	Withdrawn
			07/2011 – 01/2012	Samaritan's Purse. Emergency Shelter Preparedness for Greater Port-au-Prince and Cabaret [WITHDRAWN] HTI-11/S-NF/38535/R	US\$ 1,538,000	Withdrawn
			01/2011 – 12/2011	IOM. Pre-positioning of essential non-food Items in key regions. HTI-11/S-NF/38970/R	US\$ 2,000,000	Fully disbursed
			06/2011 – 12/2011	ASA. Assurer les besoins en eau, hygiène et assainissement pour les populations affectées et vulnérables pour promouvoir leur retour et dans les camps, et, renforcer les structures communautaires pour la réduction, la gestion et la réponse aux desastres pour Port-au-Prince, Croix des Bouquets, Gressier et Leogane. HTI-11/WS/38177/R	US\$ 724,332	Unmet
			01/2011 – 12/2011	AN. Sustainable and integrated community-based basic water & sanitation infrastructure, community management strengthening and hygiene promotion project in the region of Petit Goave (SICobWatSan) [WITHDRAWN] HTI-11/WS/38201/R	US\$ 516,500	Withdrawn
			01/2011 – 07/2011	ARI Improved WASH at Schools [WITHDRAWN]	US\$ 799,482	Withdrawn
			01/2011 – 08/2011	ARI Improved WASH for displaced persons [WITHDRAWN]. HTI-11/WS/38212/R	US\$ 898,955	Withdrawn
			01/2011 – 12/2011	Deep Springs International Sustainable Hygiene Promotion and Household Chlorination in Affected Rural Areas [WITHDRAWN] HTI-11/WS/38226/R	US\$ 384,000	Withdrawn
			01/2011 – 12/2011	ACF Contingency plan and stock for the Gonaives [WITHDRAWN] HTI-11/WS/38244/R	US\$ 842,000	Withdrawn
			08/2011 – 10/2012	Solidarités – Projet d'amélioration durable de l'accès à l'eau potable, à l'assainissement et à l'éducation en matière d'hygiène des familles et des enfants scolarisés des zones rurales de la Commune de Petit-Goave [WITHDRAWN] HTI-11/WS/38551/R	US\$ 752,509	Withdrawn
			12/2011 – 12/2012	FH. Amélioration de l'accès à l'eau, à l'assainissement et à l'hygiène des populations victimes et vulnérables dans les localités Bellevue la Montagne, Aux Cadets, Siloe et Belladères [WITHDRAWN] HTI-11/WS/39528/R	US\$ 5,350,000	Withdrawn
			01/2011 – 06/2012	ACTED Community-based hygiene awareness and best practices in earthquake and outbreak affected areas. HTI-11/WS/39534/R	US\$ 216,264	Fully disbursed
			11/2010 – 12/2011	Deep Springs International CHOLERA RESPONSE / Household Chlorination at National Scale [WITHDRAWN] HTI-11/WS/40231/R	US\$ 935,000	Withdrawn
			11/2010 – 12/2011	International Action CHOLERA RESPONSE / International Action's Clean Water Campaign against Cholera [WITHDRAWN] HTI-11/WS/40278/R	US\$ 1,000,000	Withdrawn

Category of emergency preparedness	Date	Actor/activity	Funding for emergency preparedness activities	Funding status
	12/2010 – 12/2011	FTC CHOLERA RESPONSE / community-based cholera response in the community of Carrefour [WITHDRAWN] HTI-11/WS/40281/R	US\$ 449,052	Withdrawn
	12/2010 – 12/2011	FTC CHOLERA RESPONSE / school-based cholera prevention in the Carrefour area [WITHDRAWN] HTI-11/WS/40288/R	US\$ 626,322	Withdrawn
	04/2010 – 06/2011	American Institutes for Research CHOLERA RESPONSE / Hygiene Promotion at Earthquake-affected Schools [WITHDRAWN] HTI-11/WS/40293/R	US\$ 255,065	Withdrawn
	11/2010 – 10/2011	IRW CHOLERA RESPONSE / Hygiene Promotion [WITHDRAWN] HTI-11/WS/40297/R	US\$ 558,797	Withdrawn
	10/2010 – 01/2011	ACF CHOLERA RESPONSE / Sensitisation of the population on cholera and prevention measures. HTI-11/WS/40304/R	US\$ 100,000	Withdrawn/Unmet
	11/2010 – 02/2011	GOAL CHOLERA RESPONSE / IEC and pre-positioning on cholera response kits. HTI-11/WS/40322/R	US\$ 174,120	Fully disbursed
	11/2010 – 05/2011	Haiti Participative CHOLERA RESPONSE / Sensitisation against Cholera in Schools – Pilot [WITHDRAWN] HTI-11/WS/40344/R	US\$ 266,121	Withdrawn
	07/2011 – 12/2012	ACF Gestion des désastres pour les communautés et les institutions de la commune des Gonaïves, Artibonite. HTI-11/WS/42265/R	US\$ 750,392	Fully disbursed (130%)
	07/2012	ERRF – Perspectives pour la Santé et le Développement. Education et sensibilisation à l'hygiène dans 3 bidonvilles de la Zone Métropolitaine de Port-au-Prince.	US\$ 138,939	Fully disbursed
	2011	ERRF Food for the Hungry – Community-based hygiene promotion and Cholera Prevention	US\$ 300,000	Fully disbursed
	2011	ERRF – Internews – CDAC Haiti: Communicating with Disaster-Affected Communities – Supporting government leadership to save lives and reduce vulnerability of cholera-affected and at-risk communities and increase community resilience and disaster preparedness	US\$ 197,800	Fully disbursed
	2011	ERRF – Première Urgence – Soutenir les populations vulnérables des quartiers défavorisés de Martissant et de Fontamara des risques sanitaires liés à l'épidémie de choléra et des risques liés aux catastrophes naturelles durant la saison des pluies et cyclonique.	US\$ 500,000	Fully disbursed
	2011	ERRF – CARE – Cholera Prevention in Grande Anse Department	US\$ 372,520	Fully disbursed
	2011	ERRF – Mercy Corps. Central Plateau Cholera Prevention and Mobile Cholera Outreach Project	US\$ 300,000	Fully disbursed
	2011	ERRF – Riposte et prévention de l'expansion de l'épidémie de cholera dans le département des Nippes	US\$ 300,000	Fully disbursed
	2011	Sweden – Swedish Civil Contingencies Agency (MSB) WASH specialist, sub-national coordinator: To strengthen DINEPA's preparedness and response to the cholera outbreak by ensuring sub-national coordination of WASH response in accordance with DINEPA and national Health and WASH strategies, working with implementing agencies and civil society (CHOLERA)	€47,076	Committed

Category of emergency preparedness	Date	Actor/activity	Funding for emergency preparedness activities	Funding status
	2011	ECHO CARE France 'Emergency cholera awareness, prevention and response initiatives in the Upper Artibonite and Northwest departments of Haiti' (ECHO/HTI/BUD/2010/02006)	€764,072	Committed
	2011	CERF – UNDP rapid response grant to project: Support to the Haitian Civil Protection Agency in its capacity to sustain a large communication and public sensitisation campaign against cholera (CERF 11-UDP-001)	n/a	Paid contribution
	2011	USA – CARE USA. CHOLERA RESPONSE / CARE Haiti: Emergency Cholera Awareness, Prevention and Response Initiatives in Earthquake and Cholera-Affected Areas of Haiti (USAID/OFDA)	n/a	Commitment
	2011	ECHO – Terre de Hommes Italy. Cholera Preparedness, Mitigation and Response for Croix des Bouquets and Cité Soleil, Haiti. (ECHO/HTI/BUD/2010/02009)	€749,737	Committed
	2011	Luxembourg – CARE International. CHOLERA RESPONSE / Prevention and distribution of soap to improve sanitary conditions	€50,000	Paid contribution
	2011	Luxembourg – Handicap International CHOLERA RESPONSE / Medical assistance and activities of prevention on possible contamination and purification of water to give an access to safe drinking water	€200,000	Paid contribution
	2011	Chemonics International Inc. – Agency for Technical Cooperation and Development. Community-based hygiene awareness and best practices in earthquake and outbreak-affected areas (In-kind – Material for latrine construction)	n/a	Committed
	2011	Chemonics International Inc. – Agency for Technical Cooperation and Development. Community-based hygiene awareness and best practices in earthquake and outbreak-affected areas	n/a	Committed
	2011	Sweden – Action Contre la Faim. Capacity strengthening of MSPP for Community management of acute malnutrition and community prevention and management of moderate acute malnutrition in North Artibonite	€707,720	Committed
	2011	Canada – IOM. Improving access to preventive public health information and linking communities with service providers aimed at returning/resettling and camp populations (part of M-013507)	CAD 813,455	Committed
	2011	ECHO – Action Contre la Faim. Capacity strengthening of MSPP for Community management of acute malnutrition and community prevention and management of moderate acute malnutrition in North Artibonite, Haiti (ECHO/HTI/BUD/2011/91001)	€870,000	Committed
	2011	ECHO – Cooperazione e Sviluppo (CESVI). CHOLERA RESPONSE / Renforcement des institutions sanitaires de premier niveau en Haïti et d'amélioration de l'accès aux soins de santé	€180,000	Committed
	2011	Germany – Johanniter Unfallhilfe e.V. Strengthening of DRR-capacities of local civilians (VN05 385.28/3 06/11)	€367,583	Committed
	2011	Emergency Response fund (OCHA) – AMURT International. Cholera treatment, prevention and preparedness project in NW Artibonite	496,873	Paid Contribution

Category of emergency preparedness				Date	Actor/activity	Funding for emergency preparedness activities	Funding status
				2011	ECHO – French Red cross. Projet de réduction des risques de catastrophes à base communautaire dans le département de l'Artibonite (ECHO/DIP/BUD/2011/92001)	€530,000	Committed
				2011	ECHO – Deutsche Welthungerhilfe e.V. (German Agro Action Disaster Risk Reduction in Haiti: Enhancing disaster preparedness and awareness capacities in three multi-risk exposed communities. (ECHO/DIP/BUD/2011/92002)	€650,000	Committed
				2011	ECHO – German Red Cross. Community-Based DRR in Department of les Nippes. (ECHO/HTI/BUD/2011/91004)	€400,000	Committed
				2011	Germany – Deutsche Gesellschaft für Internationale Zusammenarbeit. Disaster prevention, reconstruction aid and stabilisation of livelihoods (commit new funds of 800.000 Euro) (BMZ-No.: 2010.1896.9)	€800,000	Committed
				2011	ERF OCHA – Premiere Urgence. Soutenir les populations vulnérables des quartiers défavorisés de Martissant et de Fontamara des risques sanitaires liés à l'épidémie de choléra et des risques liés aux catastrophes naturelles durant la saison des pluies et cyclonique.	n/a	Paid contribution
				2011	ECHO – COOPI. Promotion d'une approche communautaire et différentielle sur la réduction de risque de désastres en la zone métropolitaine de Port au Prince, Haïti (ECHO/HTI/BUD/2011/91005)	€399,870	Committed
				2011	ECHO – UNESCO. Strengthening Haitian capacities for tsunami early warning and preparedness (ECHO/HTI/BUD/2011/91008).	€487,396	Committed
				2011	ECHO – Gruppo Volontariato Civile. Réduction de la vulnérabilité des communautés face aux événements naturels (catastrophes) dans le Département des Nippes (ECHO/HTI/BUD/2011/91006)	€400,000	Committed
				2011	ECHO – Action Contre la Faim. Gestion des désastres pour les communautés et les institutions de la commune des Gonaïves, Artibonite (ECHO/DIP/BUD/2011/92003)	€680,000	Committed
				2011	ECHO – Arbeiter-Samariter-Bund Deutschland e.V. School-based DRR Education in the Municipalities of Petit-Goave and Grand Goave, Department Ouest, Haiti (ECHO/HTI/BUD/2011/91007)	€315,026	Committed
				2011	Germany – Malteser International. Reconstruction of schools and disaster preparedness (BMZ-No.: 2011.1844.7)	€400,000	Committed
				2011	ERF OCHA – Internews. CDAC Haiti: Communicating with Disaster-Affected Communities – Supporting government leadership towards reducing vulnerability of cholera-affected and at-risk communities and increasing disaster preparedness	n/a	Paid contribution
				2011	ECHO – Spanish Red Cross. Disaster preparedness to reduce community vulnerability (ECHO/HTI/BUD/2011/91012)	€411,555	Committed
				2011	Germany – Deutsche Welthungerhilfe e.V. (German Agro Action). Appui au recouvrement économique et protection contre les risques de catastrophe dans le bassin de la Gosseline (BMZ-No.: 2011.1843.9)	€1,100,000	Committed
				2011	ERF OCHA – CARE International. Cholera Preventions in Grande Anse Department	n/a	Paid contribution

Category of emergency preparedness	Date	Actor/activity	Funding for emergency preparedness activities	Funding status
	2011	ECHO – French Red Cross. CHOLERA RESPONSE / Natural disasters / Projet de développement d'un système de réponse aux pics épidémiques de Choléra en Haïti (ECHO/HTI/BUD/2011/91023)	€483,229	Committed
	2011	ECHO – Solidarités International. Projet de soutien à la réinstallation durable des populations sinistrées dans leur quartier d'origine par la diminution de leur vulnérabilité aux risques environnementaux et sanitaires (ECHO/HTI/BUD/2011/91028)	€1,338,025	Committed
	2011	Norway – UNDP. HTI-11/0029 – Disaster risk reduction; strengthening national capacity and systems in Haiti	NOK 5,000,000	Paid contribution
	2011	USA – Chemonics International Inc. Community Stabilization, Enabling the GoH to Function, and Enhancing Citizen Participation in Relief and Recovery (USAID/OTI)	n/a	Committed
	2011	ECHO – IFRC. Enhancing Haitian Red Cross Disaster and Risk Management Capacity (ECHO/HTI/BUD/2011/91039)	€850,000	Committed
	2011	Spain – Adventist Development and Relief Agency (ADRA). CHOLERA RESPONSE / Reduction of cases of cholera through drinking water and public awareness on prevention of waterborne diseases	€12,893	Committed
	2011	Spain – Food and Agriculture Organization of the United Nations (FAO). Disaster risk reduction, environmental protection and support to coping mechanisms through the support of livelihoods to vulnerable households affected by the earthquake	€500,000	Committed
	2012	Germany – Malteser International. Reconstruction of schools and disaster preparedness (commit new funds of 610.000 Euro for 2012 on 10 September 2012) (BMZ-No.: 2011.1844.7)	€610,000	Committed
	2012	CAD – IOM. Emergency preparedness and response in extremely vulnerable areas (M013699)	CAD 498,500	Paid contribution
	2012	USA – IOM. NFI emergency pre-positioning and distribution (in kind)	n/a	Committed
	2012	Argentina – IOM. NFI emergency pre-positioning and distribution (in kind)	n/a	Committed
	2012	ECHO – International Medical Corps UK. Technical Assistance and capacity building for the Ministère de la Santé Publique et de la Population (MSPP) in cholera case management, surveillance and control, including direct response to major outbreaks if needed in the South and Artibonite Departments (ECHO/HTI/BUD/2011/91050)	€649,999	Committed
	2012	ERF OCHA – Perspectives pour la Santé et le Développement. Education et sensibilisation à l'hygiène dans 3 bidonvilles de la Zone Métropolitaine de Port-au-Prince.	n/a	Paid contribution
	2012	Luxembourg – Luxembourg Red Cross. Cholera prevention and treatment in Gressier, Haiti	€100,000	Paid contribution
	2012	Luxembourg – Handicap International Luxembourg. Improve storage capacities for better disaster preparedness in the departments of Nippes, South East and West of Haiti	€79,900	Committed
	2012	Germany – Hilfe zur Selbsthilfe e.V.. Disaster preparedness – heavy weight bulkhead (BMZ-No.: 2012.1843.7)	€889,440	Committed

Category of emergency preparedness				Date	Actor/activity	Funding for emergency preparedness activities	Funding status
				2012	ECHO – UNDP. Programme d'appui à la coordination des activités de gestion des risques et désastres en Haïti (ECHO/HTI/BUD/2012/91018)	€550,000	Committed
				2012	ECHO – IOM. Emergency preparedness and mitigation in extremely vulnerable areas (ECHO/HTI/BUD/2012/91017)	€500,000	Committed
				2012	ECHO – Oxfam GB. Réduction des risques et des désastres à base communautaire dans la Commune du Cap-Haïtien (Département Nord d'Haïti) (ECHO/HTI/BUD/2012/91015)	€400,000	Committed
				17/01/11	CERF – Emergency Water, Sanitation and Hygiene for Cholera Preparedness and Response HTI-11/WS/40266 (11-CEF-001)	US\$ 861,885	Fully disbursed
				2011	GFDRR – National Cholera Prevention Programme in Post-Earthquake Haiti. Institutional Capacity and Consensus Building for Disaster Risk Reduction (includes Advocacy and Training)	US\$ 199,036	
				2011	GFDRR – Reducing Disaster Risk in Haiti's Health Infrastructure. Institutional Capacity and Consensus Building for DRR (Includes Advocacy and Training)	US\$ 1,425,000	
				2011	LCDF FAO Strengthening climate resilience and reducing disaster risk in agriculture to improve food security in Haiti post-earthquake	US\$ 8,299,700	Approved
				n/a	ECHO – IFRC Reinforcing the Haitian Red Cross' response capacity to natural disasters in the aftermath of Tropical Storm Isaac (ECHO/HTI/BUD/2012/91024)	US\$ 643,501	Committed
				n/a	Sweden – Oxfam GB. To reduce and contain the incidence of cholera through secure access to safe water supplies and hygiene information, and restore dignity to Haitian population affected by Tropical Storm Isaac in high-risk areas of PaP and SE department	US\$ 285,048	Committed
<b>Daniel Urena Dropbox Folder – ND-10-11 – Rapport Visites terrain Juillet.docx</b>							
				06/2010	SCF DIPECHO – Appuyer des stratégies qui donnent les moyens aux communautés locales et institutions à mieux se préparer pour, mitiger et répondre adéquatement aux désastres naturels	€530,079	n/a
				06/2010	OXFAM GB – DIPECHO. Promouvoir un modèle organisationnel autogéré pour la Gestion des Risques et des Désastres en vue d'améliorer l'efficacité dans la préparation et les réponses aux catastrophes dans le département du Nord	€378,030	n/a
				06/2010	ACF – DIPECHO. Améliorer le niveau de préparation et les capacités de réponse face aux risques de désastres naturels desopulations de 10 localités des communes de la Tortue, Port de Paix, Anse à Foleur et Saint Louis du Nord.	€546,778	n/a
<b>1998–2011 European Commission funding on DRR</b>							
				2005	ECHO – DIPECHO – Concern. Strengthening local disaster preparedness capacities on the island of La Gonave, Haiti. ECHO/DIP/BUD/2005/02002	€104,654.5	n/a
				2005	ECHO – DIPECHO – Spanish Red Cross. Préparation aux désastres dans les départements du Nord et Nord Est. ECHO/DIP/BUD/2005/02002	€235,000	n/a

Category of emergency preparedness	Date	Actor/activity	Funding for emergency preparedness activities	Funding status
	2005	ECHO – DIPECHO – French Red Cross. Renforcement des capacités de réponse et de préparation des communautés ciblées et de la Croix Rouge Haitienne en cas de catastrophes naturelles au niveau communal, national et international. ECHO/DIP/BUD/2005/02006	€396,987	n/a
	2005	ECHO – DIPECHO – Netherlands RC. Disaster Preparedness in the Grand Sud. ECHO/DIP/BUD/2005/02004.	€350,573	n/a
	2007	FED – GoH. Programme de Renforcement des Capacités Locales pour la Gestion du Risque	€6,000,000	n/a
	2005	ECHO – DIPECHO – Oxfam GB. Improving community preparedness for disasters in urban and rural areas in Northern Haiti. ECHO/DIP/BUD/2005/02005.	€428,472	n/a
	2007	ECHO– DIPECHO– Concern WW. Supporting to strengthen and establish disaster preparedness structures and capacities on the island of La Gonâve, Haiti. ECHO/DIP/BUD/2007/02009.	€247,296	n/a
	2010 – Ongoing?	EU Del – EU IfS – IMG. Programme Européen d’Appui au Système National de Gestion des Risques et des Désastres	€15,000,000	n/a
	2007	ECHO – DIPECHO – French Red Cross. Renforcement des structures locales en charge de la préparation et réponse aux catastrophes naturelles et appui à leur rôle d’éducation et de sensibilisation communautaire. ECHO/DIP/BUD/2007/02001.	€356,866	n/a
	2007	ECHO – DIPECHO – Oxfam GB. Enhancing the capacity of local communities to foster sustainable preparedness strategies that will reduce their vulnerability to recurrent natural hazards in Northern Haiti. ECHO/DIP/BUD/2007/02011.	€400,000	n/a
	25/11/09 – 24/02/11	ECHO – DIPECHO – ACF – FRA. Renforcement des moyens et stocks d’urgence en prévision du risque cyclonique – Nord Ouest. ECHO/DIP/BUD/2009/03008.	€437,392	n/a
	01/12/09 – 08/05/11	ECHO – DIPECHO – Oxfam GB. Renforcement des Capacités de Préparation et de Réponse des Structures Communales de Gestion des Risques et des Désastres dans le Département du Nord aux Désastres Naturels. ECHO/DIP/BUD/2009/03011.	€302,424	n/a
	01/12/09 – 27/07/11	ECHO – DIPECHO – Save the Children NLD. To support strategies that enable local communities and institutions to better prepare for, mitigate and adequately respond to natural disasters. ECHO/DIP/BUD/2009/03007.	€424,063.43	n/a
	01/06/10 – 28/02/11	ECHO – Intégration Aide Hum – ACP. Projet de relèvement immédiat, de prévention et de gestion des risques et désastres dans les 5 sections communales de la vallée de Marbial, Commune de Jacmel, Département du Sud-Est, Haïti. ECHO/-CR/BUD/2010/02022.	€7,250	n/a
	18/06/10 – 17/06/11	ECHO – Intégration Aide Hum – German Agro Action. Emergency Livelihood Support and Disaster Risk Reduction amongst Earthquake Affected Communities in southern Haiti. ECHO/-CR/BUD/2010/02014.	€818,260	n/a
	2010	ECHO – Intégration Aide Hum – IFRC. Assurer la coordination des activités de la Croix Rouge avec le Système National de Gestion des Risques et des désastres. ECHO/-CR/ BUD/2010/020XX.	€999,764	n/a

Category of emergency preparedness			Date	Actor/activity	Funding for emergency preparedness activities	Funding status
			15/08/10 – 15/08/11	ECHO – Intégration Aide Hum – UNDP. Programme d'appui à la coordination des activités de gestion des risques et désastres en Haïti. ECHO/-CR/BUD/2010/02016.	€1,000,450	n/a
			01/07/11 – 01/10/12	ECHO – DIPECHO – Concern. Reducing the vulnerability of urban and rural populations in Haiti to disasters. ECHO/DIP/BUD/2010/92004.	€700,000	n/a
<b>GFDRR</b>						
			2010	GFDRR – Haiti Structural Assessment Programme. The creation of the Technical Unit for Building Assessments within the Ministry of Public Works and the development of resilience guidelines for buildings.	US\$1,705,145	Active
			2009–2011	GFDRR – Haiti Disaster Recovery and Vulnerability Reduction Programme. The project developed the concept for a central DRM coordination unit interacting with DRM units within key line ministries.	US\$1,640,895	Completed
<b>HRF</b>						
			21/10/10	HRF. UN. DRR in the South Department. DRR through watershed basins, employment, agriculture.	US\$11,000,000 (US\$8,000,000 contributed by HRF)	n/a
			21/10/10	HRF. IDB. Natural Disaster Mitigation in the South Department. Reducing vulnerability.	34 (14 contributed by HRF)	n/a
			15/12/10	HRF. UN. Capacity Building for DRM. Capacity building of government by reinforcing Civil Protection Department and by building evacuation centres.	US\$2,000,000 (of which US\$2,000,000 contributed by HRF)	n/a
			1/03/11	HRF. UN. Earthquake Prevention Plan for the North of Haiti. Reduce vulnerability against seismic threats by strengthening infrastructure and population.	US\$9,960,000 (of which US\$9,960,000 contributed by HRF)	n/a

Note: HRF in this table stands for Haiti Reconstruction Fund.

## Annex 7. International financing mechanisms

Financing channel	Financing priorities	Financing of emergency preparedness
<b>Humanitarian financing</b>		
Flash Appeal	Urgent humanitarian needs 3–6 months after disasters	Few examples – 3 related to early warning, hurricane preparedness partially financed (<.5% of Flash Appeal)
Consolidated Appeals	Strategic humanitarian priorities and needs	EP objectives / projects in 2011–2013 CAPs (e.g. coordination, government capacity-building, contingency planning)
ERRF	Urgent and unforeseen humanitarian needs	Does not finance EP
CERF	Rapid responses and underfunded crises	Does not finance EP
Private financing	Flexible – no specific priorities	Unclear
<b>DRR/crisis prevention</b>		
GFDRR	Mainstreaming DRR and CCA	EP linked to DRR (e.g. capacity-building)
Crisis Prevention and Recovery Thematic Trust Fund	Early recovery, crisis prevention, DRR	EP linked to crisis prevention and DRR <sup>1</sup>
<b>Adaptation funds</b>		
Pilot Program for Climate Resilience	Climate risk and resilience	Potential source for EP linked to climate risk, but focus on reducing risk
Global Environment Facility	Global environmental issues	Small funding to DRR, no explicit funding for EP
<b>Recovery funds</b>		
Haiti Recovery Fund	GoH recovery priorities	Capacity-building for disaster management
<b>Regional mechanisms</b>		
Caribbean Catastrophe Risk Insurance Facility	Insurance/reducing the impacts of natural catastrophes	Payment of Haiti insurance premium in 2012/2013; insurance increases liquidity post-disaster
Inter-American Committee of Natural Disaster Reduction	Emergency preparedness and response, financial protection from catastrophic loss and make economic and social infrastructure	Not identified by the case study
Caribbean Disaster Emergency Management Agency	Comprehensive disaster management	Financing to small DRR projects (US\$50,000–US\$70,000); specific projects not identified by research
<b>Multilateral development banks</b>		
World Bank	Reduce vulnerability/increase resilience, support sustainable reconstruction, build human capital, and promote inclusive growth	Government capacity-building for DRM
Inter-American Development Bank	Education, private sector development, energy, water and sanitation, agriculture and transport	Government capacity-building

<sup>1</sup> Individual projects were not reviewed, it is assumed that projects might have links to preparedness.

# **Analysis of financing mechanisms**

# Financing of emergency preparedness and humanitarian mechanisms

*Glyn Taylor and Elisabeth Couture*

## Individual funding instruments

### Emergency Response Funds

#### Current usage and suitability for preparedness funding

Emergency Response Funds (ERFs) have been the least 'regulated' of the Humanitarian Funds to date. Unlike Common Humanitarian Funds (CHF), which are acknowledged as requiring a critical mass of funding, management and advisory capacity and a Consolidated Appeals Process (CAP) or similar appeal, ERFs have been created in a range of contexts. The initiative to set up an ERF can come from a HC/RC looking for a mechanism through which to fund underserved priorities, from a prominent donor looking to create a useful disbursement channel, sometimes in the aftermath of a disaster. The general policy of ERFs, as outlined from Office for the Coordination of Humanitarian Affairs (OCHA) in New York, is that the funding of preparedness is beyond the mandate of ERFs. As evident in the funding table below, ERFs vary greatly in terms of scale, many of the smaller Funds being seen as quite fragile in terms of management capacity (e.g. Indonesia: 'Like many ERF/HRF mechanisms the level of staff available is inadequate to meet the extent of the expectations that are involved.' (OCHA, 2013)) and narrowness of donor base (e.g. Colombia: 'ERF Colombia was initially supported by Norway, Sweden and Spain. These three donors continue to be its greatest supporters. While only one new donor (San Marino) has been identified in the short term, OCHA has expressed its desire to increase donorship and double the amount of the Fund.' (OCHA, 2013: 9)).

The Ethiopia HRF is an outlier, generally described as a 'hybrid' financing instrument, having many of the attributes of a CHF (scale, well developed allocation and disbursement procedures, with a strong advisory board) as well as those of an ERF. Ultimately, the stance of the Ethiopian Government, and their reluctance to see a standing Humanitarian Appeal (CAP or similar), means that the HRF is likely to remain. In keeping with the historical lack of standards around ERFs, the Ethiopia Fund is characterised as an ERF on the basis of what it lacks (a jointly constructed CAP or similar appeal, and fixed or standard allocation rounds). Given its scale and national importance, the Ethiopia HRF is the most studied and evaluated of the ERFs.

There are multiple examples of ERFs being used to fund preparedness activities. As a rule, however, these activities are not prioritised by the Fund and constitute a relatively small proportion of what are small funds to begin with. Context appears to play a significant part in the extent to which preparedness is funded in ERFs, but more significant factors appear to be the fundamental nature of the funds and the amount of funding available. Where emergency preparedness activities are included, activities are largely at the community level, and do not address legislation, national standards, international and regional agreements, resource allocation, coordination or information management systems.

As noted in the introduction, these interventions fit an expected pattern given the nature of these funds. Activities are focused at the community level, and are suitable for quick interventions. Longer-term activities requiring extensive engagement with Government are largely absent.

Context does appear to play a part in the relationship between ERFs and preparedness, as noted above. There is no broader research on the use of ERFs across contexts; Table 1 demonstrates that they exist in CAP and non-CAP countries; conflict or post-conflict scenarios are prevalent, together with those prone to natural disasters. The consistent characteristics of ERFs are the requirement for OCHA and a HC to be present. Table 1 demonstrates that ERFs have funded preparedness in very small amounts according to the disaster and risk profile type in-country. There is no clear pattern of risk type addressed.

## Evaluations and reviews

Only one global ERF evaluation (Universalia, 2013) has taken place so far, in 2012, and a number of country-level evaluations prior to this. The global evaluation finds that the ERF model is functioning well overall, with a clear emphasis on gap-filling in 'traditional emergency responses. Preparedness was not a main focus of the evaluation, which notes that it 'did not "fit"' (Universalia, 2013: 14) inside the evaluation categories, which had been subject to wide consultation in advance. Despite preparedness having been 'pre-judged' as not centrally relevant to ERFs, the evaluation addresses the issue regularly, predominantly from the angles of scale and project duration and policy.

**Table 1. Use of emergency response funds by country**

Country	Total ERF funding (US\$)	Funds allocated for preparedness (US\$)	Preparedness activities
Ethiopia	27,571,621	No data	<ul style="list-style-type: none"> <li>• Early warning systems</li> <li>• Community preparedness and community-managed drought risk preparedness and response</li> <li>• Institutional and legislative frameworks (drought risk management plans)</li> </ul>
Haiti	1,439,800	No data	<ul style="list-style-type: none"> <li>• Early warning and response systems for cholera</li> <li>• Community-based awareness raising, training and sensitisation (cholera prevention)</li> </ul>
Indonesia	1,084,818	99,979	<ul style="list-style-type: none"> <li>• Community-based early warning systems for cold lava flooding</li> <li>• Community-level first responder emergency response and risk reduction training focusing on extreme weather</li> <li>• Early warning for whirlwind events affecting small islands</li> <li>• Contingency planning exercises with local government</li> <li>• Early recovery cluster: formed four Disaster Preparedness groups and developed contingency plans and evacuation exercises as preparedness for lava flows</li> </ul>
Myanmar	1,209,862	No data	<ul style="list-style-type: none"> <li>• Hygiene and sanitation training package</li> </ul>
Occupied Palestine Territories	5,531,651	No data	<ul style="list-style-type: none"> <li>• Preparedness training at Al 'Awda Hospital in Gaza, enabling operation throughout emergency situations</li> </ul>
Pakistan	1,420,204	No data	<ul style="list-style-type: none"> <li>• WASH and health clusters: Training and community awareness for internally displaced persons</li> </ul>
Colombia	1,183,140	83,762	<ul style="list-style-type: none"> <li>• Household training in seed management and storage</li> <li>• Improvements to health posts to allow for stockpiling of supplies in preparation for conflict and natural disasters</li> </ul>
Yemen	8,470,253	590,747	<ul style="list-style-type: none"> <li>• WASH and health: Increased storage capacity for safe water; access to adequate water and sanitation facilities</li> </ul>
Democratic Republic of the Congo	1,078,368	166,020	<ul style="list-style-type: none"> <li>• Rehabilitation of Lodja airport to restore ongoing humanitarian access</li> <li>• Training for chlorinators, awareness sessions for safe water management, and training for hygiene agents</li> </ul>
Kenya	2,111,871	1,351,597	<ul style="list-style-type: none"> <li>• Animal vaccinations to prepare for and mitigate losses due to drought and disease</li> <li>• Drought tolerant seeds and enhanced seed storage capacity</li> <li>• Conflict preparedness and prevention through listeners' groups and training of radio presenters</li> </ul>

Notes: Given the time constraints, we started with annual reports from 2012, and based on the evidence, looked further back in time for countries that seemed most open to funding preparedness.

The scale of funds is addressed most frequently. The evaluation's third finding:

*"ERFs are only beginning to make contributions to disaster preparedness and resilience building and may not have sufficient critical mass to make viable contributions"* (Universalia, 2013: 15).

Finding 20 also considers the overall size of the funds:

*"The size of the ERF does not truly lend itself to more substantive processes of resilience building*

*or building long-term disaster risk reduction (DRR)-related capacity"* (Universalia, 2013: 27).

The report also notes the issues of the short duration of projects generally funded by ERFs:

*"Common to all ERFs is also a maximum six-month timeframe (excluding the possibility of no-cost extensions). This places the ERF firmly in the context of a short-term instrument, one of its unwritten, but primary characteristics. In the context of being a*

*short-term measure, the current size of individual ERF projects lend themselves to rapidity of action, suited to life- and livelihood-saving activities and gap filling. The size of the ERF does not truly lend itself to more substantive processes of resilience building or building long term DRR-related capacity.”*

The evaluation notes that over and above the relatively small scale of ERFs in general, there is tendency to prioritise emergency response. It is possible to say, therefore, that where ERFs have funded some elements of preparedness, they would tend to revert to response in the event of low levels of funding within the ERF itself, or in instances where demand for response funds was heightened.

Under its recommendation 6, the evaluation notes *“a growing voice that argues that the ERF mechanism should be part of a more pro-active and preventative stream, or at least favour remedial resilience building following a disaster”* (Universalia, 2013: 40).

This and other recommendations argue that OCHA needs to strengthen and clarify both policy and specific guidance, and be clearer about the extent to which ERFs should become involved in preparedness. There have been a small number of contexts where preparedness is very clearly a priority for a range of stakeholders ERFs have been used opportunistically for preparedness in the absence of other funding vehicles. These countries have exploited the lack of clarity in guidance and policy, but are unusual contexts and do not have much to add the contexts where OCHA is involved more frequently. Interviews with OCHA staff demonstrated that in the minds of FCS, the policy is clear and that ERFs should not be involved in financing preparedness work (OCHA staff, pers. comm., August 2013).

The country review for Ethiopia finds that the HRF does not have sufficient reserves to invest in areas that may be outside of the traditional mandate of filling emergency gaps. Such preparedness as is funded is largely linked to the protection of livelihoods, rather than community building, resilience networks, or capacity building for DRR (again, a larger focus on immediate humanitarian need, rather than a broader strategy for resilience).

The evaluation mentions that some stakeholders argue for more active engagement in resilience building and DRR activities in order to avert humanitarian crises. In the Ethiopian context, it is recognised that the resources of the HRF are limited, and so diverting resources to activities that do not provide immediate humanitarian relief would dilute the success that these current activities are having (basically, arguing against expansion of activities based on the Fund’s current design.) A number of complementary mechanisms in Ethiopia, such as the Productive Safety Net Programme (PSNP) look at resilience through

a more developmental lens<sup>1</sup>. The managers of the HRF would undoubtedly argue that the Fund retains its narrow remit to ensure that it continues to operate as a flexible and somewhat independent Fund.

The evaluation also notes that in the context of the chronic nature of humanitarian crises in Ethiopia, there has been discussion that the Fund’s Advisory Board examine the possibility of setting aside a percentage of funds for the purpose of implementing DRR and preparedness activities (this does not address the idea of Fund expansion from a resource point of view, but potential context-specific expansion in mandate and Fund use).

*“Recommendation 4. OCHA in Ethiopia should explore the possibility of notionally setting aside a small percentage of available funds for more DRR/resilience-related activities, recognising the primacy in Ethiopia of the need to ensure adequacy of life/livelihood-saving programming.”* (Universalia, 2013: 14).

The paper notes that that a focus on resilience goes beyond the strategic intentions of the ERF/HRF model, and setting aside funds for these activities would require an assurance that sufficient resources would be available to address the primary goals of the Fund:

*“It would be unwise at this time to recommend a specific level for such earmarking. However, from a purely practical sense, an earmark of less than 10% would probably not result in a sufficient critical mass of new projects so as to be able to eventually evaluate their worth. Conversely, earmarking more than 20% would appear on first insight to possibly threaten the viability of the demand-driven fund’s to respond to emergencies.”*

### Potential for expansion

The country review for Ethiopia finds that the HRF does not have sufficient reserves to invest in areas that may be outside of the traditional mandate of filling emergency gaps. Preparedness projects via the HRF tend to be those linked to the protection of livelihoods, rather than community building, resilience networks or capacity building for DRR (again, a larger focus on immediate humanitarian need, rather than a longer strategy for resilience).

The HRF evaluation mentions that some stakeholders argue for more active engagement in resilience building and DRR activities in order to avert humanitarian crises. In the Ethiopian context, it is recognised that

<sup>1</sup> Ethiopia undertakes a Government-led, food-based ‘humanitarian requirements’ survey every year (Technical work by FAO and WFP). This generates a figure for populations requiring food assistance by region. The Government finalises the figures itself, often reducing the figures arrived at via the technical methodology. The Government figures are used as the basis for the Productive Safety Net Programme plugged into the national safety net mechanism. The humanitarian system (including HRF) makes up the difference.

the resources of the HRF are limited, and so diverting resources to activities that do not provide immediate humanitarian relief would dilute the success that these current activities are having (basically, arguing against expansion of activities based on the Fund's current design.) A number of complementary mechanisms in Ethiopia, such as the Productive Safety Net Programme (PSNP) look at resilience through a more developmental lens. The managers of the HRF would undoubtedly argue that the Fund should retain its narrow remit to ensure that it continues to operate as a flexible and somewhat independent Fund.

The evaluation also notes that in the context of the chronic nature of humanitarian crises in Ethiopia, there has been discussion that the Fund's Advisory Board examine the possibility of setting aside a percentage of funds for the purpose of implementing DRR and preparedness activities (this does not address the idea of Fund expansion from a resource point of view, but potential context-specific expansion in mandate and Fund use). The paper notes that a focus on resilience goes beyond the strategic intentions of the ERF/HRF model, and setting aside funds for these activities would require an assurance that sufficient resources would be available to address the primary goals of the Fund. The Ethiopia HRF funds: early warning systems; community preparedness; institutional and legislative frameworks through drought risk management plans (local and national); and community-managed drought risk preparedness and response. Some other elements of funding through Ethiopia's HRF could be considered as preparedness, but fall outside the matrix defined for this study. Policy in Ethiopia is clear, however: preparedness is a secondary consideration for the Fund, and requests will be considered only when all urgent requests for response funding and have been covered. The Ethiopia HRF has an established allocation process, rooted in a process of prioritisation through the cluster system.

The Haiti Emergency Relief Response Fund (ERRF) has been poorly supported since 2010. It has allocated increasingly limited money to: early warning and response system for cholera; awareness raising (community preparedness); and training and sensitisation.

Additional country case studies, as examined in the 2012 evaluation, note the potential for expansion of the ERFs based on the vague nature of the guidelines and that preparedness is not explicitly excluded, but, similarly to Ethiopia, note that this may dilute the focus of the fund. In the case of Afghanistan, it was noted that as the Fund is changing and growing, it will be likely to generate the same debate over preparedness and response that can be found in other countries supported by an ERF (such as Ethiopia). In the context of Afghanistan, it is anticipated that such a debate would potentially be problematic, and would require sensitive management.

In Colombia, the evaluation found that the ERF is being used increasingly for preparedness and early recovery activities. This has resulted in a need to balance these added activities with the Fund's primary objectives of response. This increase in scope is partly due to the active role of the Advisory Board in promoting the adoption of disaster preparedness, early recovery and capacity building through the ERF. Recognising that emergency preparedness is not a component of disaster response generally supported by the ERF, the evaluation found that the Fund could act as a flexible and small-scale funding mechanism, principally for gap-filling. Based on the increasing use of the ERF for preparedness activities, in the context of Colombia the evaluation recommended (with the support of the Advisory Board) that the HC and OCHA consider a percentage of the fund to be dedicated to emergency preparedness.

In the Occupied Palestinian Territories, the evaluation found that the chronic nature of crises would justify a contingency fund for preparedness initiatives, specifically regarding issues of protection. This potential expansion differs from the others in that it does not address preparedness activities in the common sense; rather, it addresses the need for a contingency fund to allow for response in the event of additional crises. The evaluation found that the HRF was not the most appropriate fund for addressing household-level livelihood protection, and that the addition of this separate fund would be more suitable.

Desire for expansion of ERFs in evaluations seems to emanate from a recognition that the activities are underfunded in general, rather than from any realistic expectation that ERFs can effectively fill the gap. The 2012 global evaluation references a "tug and pull" over the use of ERFs for funding preparedness, and recommendations are made in the Colombia 2012 report for an expansion to include DRR and preparedness. However, given that ERFs already do so little at the national/macro/government level, it seems unlikely that expansion would enable the mechanism to take on preparedness activities spanning the matrix.

## Common Humanitarian Funds

### Current usage and suitability for preparedness funding

In the absence of published standard guidelines for Common Humanitarian Funds (CHF) as a whole, there is no single document that puts forward a policy stance on CHF's relationship with preparedness. At the country level, guidance is not standard and individual guidelines tend not to address preparedness directly. The guidelines for Somalia (CHF, 2012a), for example, make no reference to preparedness funding in the guidelines for standard allocations. For the emergency reserve (approximately

20% of the fund retained annually for unforeseen emergencies), however, funding for preparedness is specifically excluded.

In each case, the specific rules of the Fund are one important factor in governing the extent to which any given CHF will fund preparedness. As noted throughout, all CHFs operate within CAPs or similar appeal frameworks. CAPs define, or should define, priorities within any country context. The majority of CHFs make two standard allocations per year, theoretically taking a snapshot of current priorities at the time of each allocation. Although allocation processes vary slightly by country, most rely heavily on clusters to bring together partners and refine priorities on a part consensual/part competitive basis. In some cases, the secondary, cluster-led process is steered by a 'guidance note' from the HC or fund management unit on their behalf. Such a note may recommend specific sectoral or geographical prioritisation.

As noted earlier, the contexts in which CHFs tend to operate and the principles that apply to their allocation processes would naturally tend to limit the range of preparedness activities that they fund. In summary, it should be expected that CHFs will operate on humanitarian principles, according to their stated purpose (to fund priorities and fill gaps with CAPs) and with a predictable distance from central government on issues of capacity building and policy formation. As such, funding for preparedness is likely, but largely for:

- the preparedness of the international system (including key line and/or local ministries with which it has strong technical links), and
- specific, predictable and/or cyclical emergencies within a country context.

Overall, this is likely to constitute a narrow range of activities within the matrix.

### CHFs by country

Focusing on the 2012 annual reports, CHFs directed funding to a limited range of activities within the preparedness matrix. As with the ERFs, the focus was predominantly on contingency preparedness and response planning (including community preparedness); training exercises (specific to each country context); emergency services, standby arrangements and pre-positioning (predominantly through stockpiling); and information management and communication (communication systems). Preparedness and response planning were most prevalent in Somalia, South Sudan and Sudan; and specific country-context training activities in Central African Republic, Somalia and Sudan (CHF, 2012b, c, d, e).

So while each country fund did address preparedness activities, they allocated little or no funding to institutional and legislative frameworks; coordination; information

management and communication, which were largely absent (although in Democratic Republic of the Congo, the Pooled Fund makes automatic allocations to its own running costs and some for clusters, specifically for the purpose of strengthening the management of the Fund and the Humanitarian Action Plan (HAP) more broadly).

### Central African Republic

Both the health and nutrition clusters have preparedness objectives within the CAP. This includes the creation or improvement of a national epidemic early warning system) as well as mobile clinic services and training of health workers (CHF, 2012f: 12). The report also notes that under the nutrition section, training for health workers on malnutrition diagnosis and treatment was undertaken and a nutrition database in place at the Ministry of Health (MoH) (as well as staff training of the use of this database) (CHF, 2012f).

The CHF Annual Report (2012f) lists a number of achievements in preparedness related to malaria prevention; reinforcement of health systems through training to MoH staff; increased staffing levels; and outreach services to vulnerable populations.

Similarly for nutrition, achievements are noted in an improved database and appropriate training at the MoH; the creation of new therapeutic treatment units (static and mobile); and strengthening of MoH structures in targeted geographical areas.

The CAP for 2012 totaled US\$124 million and received US\$77 Million. Of this amount, US\$5,873,393 (7.6%) was provided through the CHF. Due to the lack of disaggregated data, it is impossible to state the proportion of CHF funding that went to preparedness. Only the health and nutrition clusters stated objectives in preparedness, however, and these received combined CHF funding of US\$1,788,200 (30%) of the CHF total. In the absence of any data on which to estimate the proportion of this funding that went to preparedness, a deliberately generous estimate of 30% would see the total of CHF funding going to preparedness as less than 1% of the CAP total.

### Democratic Republic of the Congo

The Democratic Republic of the Congo (DRC) Pooled Fund Annual report for 2012 noted funding to multi-year humanitarian projects supported for strengthening communities' abilities to absorb shocks and survive unforeseen crises (community preparedness in the matrix) (CHF, 2012g: 6).

The Fund's largest allocation (under the 'multi-sectoral' category) was the provision of US\$13.5 million to UNICEF's Rapid Response to the Movement of Populations (RRMP) project in eastern DRC. In recognition of the highly volatile security context in the east, the RRMP pre-positions implementing partners, financial resources,

and supplies to enable a rapid humanitarian response to population movements (either displacements or returns), after multi-sectoral assessments by partners. The RRMP provides emergency non-food items, water and sanitation, with emergency education to the most affected communities (CHF, 2012g: 11). Listed as a response project, the RRMP is also an example of a clearly targeted preparedness mechanism, and a very highly regarded programme overall. Whilst clearly fitting within the preparedness matrix, it is again worth noting that this is preparedness in a very narrow sense: preparedness for the international system to respond with a narrow range of activities and in a limited geographical area against a clearly specified and very predictable set of risks.

The DRC Humanitarian Action Plan (HAP) for 2012 constituted an appeal for US\$791 million, of which US\$584 million was received. The Pooled Fund channeled US\$88,872,723 (15%) of this funding. Although the DRC Fund has a higher standard of financial reporting than most, there is no breakdown showing preparedness funding. The RRMP programme is listed as a response mechanism, and funding towards “strengthening communities’ abilities to absorb shocks and survive unforeseen crises” is a ‘cross-cluster’ activity.

### Somalia

Both the health and WASH clusters have implemented projects with preparedness objectives, including the establishment of a flood early warning system (funded through the WASH cluster). The CHF Annual Report (CHF, 2012h) noted achievements in the health cluster including training for health workers in common illnesses and emergency preparedness for communicable diseases (CHF, 2012h: 19), and the earmarking of half a million US dollars for Acute Watery Diarrhoea (AWD) and cholera prevention, as well as other preparedness activities in highly populated, cholera-prone areas (CHF, 2012h: 19).

The WASH strategy included strengthening capacity for emergency preparedness and disaster risk reduction. The report also notes funding for the ‘WASH Supply Hub’ both for flooding and cholera in the Hiraan region, including the provision of district coordination focal points for AWD/ cholera and flooding. The report partially attributes the absence of major cholera outbreaks to the activities. (CHF, 2012h: 27).

The CAP for 2012 totaled US\$1.17 billion, and received US\$612 million. Of this amount, US\$92.8 million (15%) was provided through the CHF. Due to a lack of disaggregated data, it is impossible to state the amount of CHF funding that went to emergency preparedness. Only the Health and WASH clusters reported achievements in preparedness, and these received combined CHF funding of US\$26,616,590 (28.6%) of the CHF total (including 2011 carryover per cluster). Of WASH

funding, US\$1 million was allocated to flood early warning; however, there is an absence of additional data on which to estimate the proportion of overall funding attributed to preparedness activities. Assuming the full 28.6% of CHF funding through the health and WASH clusters was allocated to preparedness, this would comprise 4.3% of the CAP total.

### South Sudan

CHF disbursements for preparedness in South Sudan were largely directed to stockpiling and pre-positioning of supplies in strategic hubs (CHF, 2012i: 18). Clusters engaging in these preparedness activities were education, emergency telecommunications, and food security and livelihoods. In emergency telecommunications, the cluster was able to strategically pre-position stock and acquire the necessary emergency telecommunications kits and an adequate number of staff to provide data connectivity and security telecommunications. This enabled the cluster to respond quickly and effectively to the needs of the humanitarian community, improve the overall security environment for staff and assets, improve emergency telecommunications preparedness to respond to new emergencies, and enhance the operational response and coordination among agencies (CHF, 2012i: 21).

The CAP for 2012 totaled US\$1.1 billion, and received US\$788 million. Of this amount, US\$118.3 million (15%) was provided through the CHF. The education, emergency telecommunications, and food security and livelihoods clusters all reported preparedness activities in 2012. The total combined budget for these clusters was US\$17,510,248 (14.8%) of the CHF total. Due to the absence of disaggregated data, it is impossible to estimate the amount of funding allocated to emergency preparedness activities. Assuming that the full amount of funding under these clusters (14.8% of CHF total) was attributed to emergency preparedness, this would comprise 2.2% of the CAP total.

### Sudan

The health sector featured prominently in Sudan’s allocations to preparedness. The sector’s key objectives were to improve access to primary and secondary health care services. As such, the sector prioritised the allocating of CHF funds to the strengthening of emergency preparedness and response capabilities, including outbreak control. Additional funding went to community awareness-raising and training of health workers (CHF, 2012j: 18–19).

Sudan’s 2012 CAP totaled US\$1.05 billion, and received US\$579 million. Of this amount, US\$75.8 million (13.2%) was provided through the CHF. The health cluster received US\$11,133,592 through the CHF (29% of CHF total funds), however, disaggregated project data is lacking, and it is impossible to determine the amount of CHF funding for emergency preparedness. Assuming the

full amount was allocated to preparedness activities, this would see the total of CHF funds going to preparedness as 1.9% of the CAP total.

### Evaluations

The 2011 evaluation of CHF concludes, in general terms, that “The CHF is seen by most recipients as an accessible, efficient, and relatively flexible fund.” (CHF, 2011). Whilst the review doesn’t place any emphasis in funding for preparedness, or preparedness more generally, it does note that:

*“mismatch between growing understanding of, and expectations about, the CHF from the different clusters and recipient agencies on the one hand, and a decline in actual donor contributions to the CHF on the other.”* (CHF, 2011)

The report goes on to note that as funds fall in general terms<sup>2</sup>, the ‘possibility of using the CHF for other than clearly humanitarian purposes’ (CHF, 2011) has also diminished. The problem with the decrease in funding, however (noted as a general trend in the ODI paper), would apply perhaps disproportionately to preparedness. As noted earlier, while the CHFs remain fundamentally focused on response as their primary purpose, it may be harder at each country level to make the case for the funding of preparedness or recovery programming, or both. As noted in each country context above, CHFs each contribute a significant but small proportion to each CAP or Appeal. The amount allocated to preparedness via CHFs cannot currently be considered significant.

### Natural and conflict risks

The funding for preparedness in the CHFs follows a similar pattern to that in the ERFs. Stockpiling in advance of predictable and cyclical emergencies is a feature in Congo, Sudan and Somalia, with training, especially in health and WASH. While these actions are clearly within the preparedness matrix and it is right to consider them as preparedness activities, their relation to emergencies that are considered to be very likely and imminent could arguably put them into the category of ‘early action’, considered to be the early part of the more appropriate humanitarian funding cycle.

### Potential for expansion

CHFs and their relationship to preparedness are not addressed directly in the text or recommendations from the CHF synthesis report (2011). In relation to the other humanitarian funding instruments, CHFs appear at face

value to be the most stable, and to have the greatest potentially for adaptation to preparedness funding. They are relatively large, and have support in each country context (albeit variable and apparently diminishing). Expansion to fund preparedness has to be placed firmly in the context of the CAPs that the funds support, as discussed earlier.

## Central Emergency Response Fund

### Current usage and suitability for preparedness funding

The Central Emergency Response Fund (CERF) is the humanitarian financing instrument with the most clearly defined role and limits. The CERF in its current configuration was launched in 2006, with a target size of US\$500 million. Essentially a fund at the disposal of the ERC and utilised in high profile crises (amongst others), the CERF has global profile. Certainly scrutiny in New York on the use of the fund is very high and its performance and accountability framework (PAF) is very well defined. Four countries every year are selected for specific studies, which analyse the use of the fund in-country against the PAF criteria. The CERF works through two ‘windows’: the Rapid Response Window (RRW) and Under-Funded Emergencies (UFE) Window, each with separate guidance for applying agencies and allocation. As noted above, the CERF, with its global reach, is the only instrument that can operate in countries with no standing OCHA presence. Whether through the RRW or UFE, however, the CERF’s ‘Life-Saving Criteria’ apply. This set of criteria requires applicants to demonstrate a direct life-saving application to projects funded under the CERF. The stance on preparedness is very clear:

*“As per the CERF mandate, the following issues are NOT included in the criteria as they are not eligible for CERF support:*

**Preparedness:** *Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations. The CERF does not support regular agency stockpiling, or pre-positioning of relief goods as a contingency measure.”* (CERF, 2010)

### CERF by country

Forty-seven countries received CERF funding in 2012. The tables and analysis below are the result of a review of the HC’s reports from 22 recipient countries, both CAP and non-CAP, and all of the CERF PAF reports up to and including 2012.

<sup>2</sup> There is no specific research available on Funding flows to CBPFs overall. Anecdotally, it appears that one or two key supporters of pooled funding, notably the Netherlands have reduced humanitarian funding significantly and this has had a significant effect on some funds. The general downward trend in funding flows probably accounts for the phenomenon as well.

Of the 22 HC reports, 9 made reference to preparedness and/or resilience building as targets incorporated into projects that received CERF funding.

Table 2, summarises achievements classified as preparedness in the reports and attributed to CERF funding from the HC reports.

Scrutiny of applications to the CERF is heavy and consistent. Where the CERF has funded elements of preparedness within the individual projects in some contexts, it is reasonable to assume that:

- the CERF has been directed to priority response projects of which a proportion was deemed reasonable on preparedness criteria; and
- that the applying agency (possibly in conjunction with the HC/RC) has successfully made a case that the project meets the life-saving criteria.

The PAF reports often report preparedness in a different light to the HC reports and inconsistently (given that there are no questions in the PAF on preparedness). In Kenya, the CERF made a significant contribution for 'response/recovery and preparedness for drought victims'. The total allocation was US\$22,700,000, with no specified amount for preparedness. In keeping with the focus on drought, FAO and WFP requested funding for victims. Again with no disaggregated figures for preparedness available, US\$17 million was allocated through the RRW for both agencies. A minimal amount of CERF funding was allocated to Djibouti, predominantly through the UFE. It addressed community preparedness and training for resilience building of drought-affected communities.

Notwithstanding the CERF guidance, a narrow range of preparedness activities have been funded through the CERF. In keeping with the other instruments, these tended

**Table 2. Achievements classified as preparedness and attributed to CERF funding**

Country	Total CERF contribution	Preparedness activities
Nepal	US\$4,997,385 (no CAP)	Trained WASH, Nutrition and Health cluster members in humanitarian preparedness and response WHO and MoHP procured stockpiles; strengthened early warning and reporting systems; improved early diagnosis of health, nutrition and WASH-related ailments Agriculture: improved food security and long-term resilience
Djibouti	US\$4,019,325 (9.1% of funded CAP)	Hygiene promotion campaigning Meeting of WASH cluster to improve overall coordination and emergency preparedness
Afghanistan	US\$9,995,396 (1.9% of funded CAP)	Protection cluster engaged village leaders in community-based preparedness activities
Chad	US\$14,781,195 (4.2% of funded CAP)	WASH cluster increased hygiene and sanitation sensitisation through radio messages throughout the cholera epidemic Training for communities and heads of health centres 249 community workers trained in cholera prevention
Niger	US\$24,069,716 (5.9% of funded CAP)	WASH project provided treatment and disinfection of water sources in households at risk of cholera contamination in order to prevent a future outbreak
Philippines	US\$13,010,727 (US\$6,936,150 to the CAP; 8.8% of funded CAP)	Livelihood support reduced vulnerability and strengthened resilience to shocks
Sudan	US\$20,158,449 (3.5% of funded CAP)	Warehouse space to accommodate and expand supplies as part of emergency preparedness
South Sudan	US\$40,044,091 (4.6% of funded CAP)	WASH project: hygiene promotion messages focused on effective water treatment and storage Multi-sector project increased water supply; curbed the spread of water-borne diseases; preparedness for potential AWD/cholera outbreak
Zimbabwe	US\$2,006,304 (0.8% of funded CAP)	Rapid Health Assessment on Preparedness and Response Capacity in two districts 60 schools, 21 clinics and their communities were reached with WASH facilities and hygiene promotion messages

to be focused on community-level activities (notably training for health workers and hygiene promotion), stockpiling and warehousing.

### Potential for expansion

Table 3 summarises suggestions or recommendations related to preparedness, derived from the HC reports.

Again, these comments and recommendations tend to speak to structural problems, rather than ones which the CERF, or any funding mechanism, can solve. Arguably, the expectation that a global mechanism could address these local, structural issues is unlikely.

### Evaluations and PAF reports

The 5-year evaluation of the CERF in 2011 has one significant note on preparedness:

*“There are occasions where preparedness may be a more appropriate investment than response alone. Current definitions of humanitarian action include preparedness, and there are contexts where preparedness can be the most effective life-saving intervention. However, the CERF mandate does not include preparedness, and CERF Secretariat mentions that it does not have the resources to*

*support it. Consequently, the current life-saving guidelines specifically prohibit preparedness. The CERF guidelines should probably be more flexible in dealing with such contexts, or integrate a preparedness component, possibly a cross-cutting issue, when this is not funded. Still, there is the risk that a large focus on preparedness would lead to the dilution of the CERF, and it would be impossible to support preparedness on an exceptional basis as once the precedent is made UN agencies will expect it to be supported in other situations.”*

In doing so, the evaluation effectively recognises the importance of preparedness, and advocates for a ‘flexible approach’, then details why such flexibility is practically impossible. A number of the PAF reports for 2012 and 2011 recognise that preparedness is under-funded in general, and called for the CERF to be more flexible in its approach, or to advocate to other donors for bilateral funding to preparedness.

The Djibouti PAF report recommends that the ‘CERF Secretariat should develop further material and guidance to support prioritisation and allocation discussions.’ In the report on the Philippines, it was noted that although the CERF does not fund preparedness and recovery activities, the acting HC felt that the CERF Secretariat could play a

**Table 3. CERF-related suggestions or recommendations related to preparedness**

Country	Total CERF contribution	Preparedness suggestions
Lesotho	US\$6,220,011 (no CAP)	<ul style="list-style-type: none"> <li>Country Team: due to the context of high vulnerability, future interventions should take resilience building into consideration as part of early recovery</li> <li>Country Team: short-term humanitarian aid should be continued with longer-term funding for sustainability and resilience to climate change</li> </ul>
Congo	US\$31,486,288 (4.9% of funded CAP)	<ul style="list-style-type: none"> <li>Country Team: Strengthen the capacity of stakeholders in WASH activities to improve their preparedness for response</li> <li>Ensure that contingency plans are in place for specific epidemic in risk areas, and that these serve as a framework for response</li> </ul>
Democratic People’s Republic of Korea	US\$12,920,667 (no CAP)	<ul style="list-style-type: none"> <li>Country Team: The Government does not participate enough in CERF processes at line ministry level. Regular meetings with coordination or DRR focal points in Government in all CERF sessions will improve understanding and cooperation</li> </ul>
Ethiopia	US\$13,984,781 (no CAP)	<ul style="list-style-type: none"> <li>CERF Secretariat: The lack of an emergency preparedness fund contributed to poor response during the early phases of agriculture- and health-related epidemics. Consider integrating some preparedness and prevention budget.</li> </ul>
Niger	US\$24,069,716 (5.9% of funded CAP)	<ul style="list-style-type: none"> <li>Country Team: The Government, with support of the humanitarian community, must invest more resources in DRM and emergency preparedness</li> </ul>
Peru	US\$2,221,613 (no CAP)	<ul style="list-style-type: none"> <li>Country Team: Recovery plans should analyse the impact of emergency over structural weaknesses in order to build resilience; increase community knowledge of DRR, preparedness and response</li> </ul>
Philippines	US\$13,010,727 (US\$6,936,150 to the CAP; 8.8% of funded CAP)	<ul style="list-style-type: none"> <li>CERF Secretariat: Consider DRR activities in CERF funding for preparedness and mitigation; advocate for the inclusion of DRR in CERF’s life-saving criteria</li> <li>Life-saving criteria should include capacity building and training</li> </ul>

role in advocating for donors to finance preparedness and resilience. In Bolivia, where development is clearly the dominant aid paradigm, the PAF report noted that there should be a greater focus on very practical or operational efforts for disaster preparedness in general. In a country where small natural disasters (in relative terms) lead to CERF requests, the implication in the report was that requests to the CERF UFE window might be attracted and fully justifiable in the absence of other humanitarian funding, if demand for preparedness funding was higher. The Ethiopia report, in a similar fashion, notes that 'the lack of an emergency preparedness fund contributed to poor responses during the early phase of the [AWD] epidemic.' It makes the suggestion that that the CERF Secretariat should consider funding preparedness.

### Conclusion

Overall, the CERF is arguably the most tightly defined and regulated of all of the humanitarian financing mechanisms. It is first and foremost a humanitarian response fund, and this *modus operandum* is cemented in place by the UN resolution under which it operates and its advisory group of donors. The CERF has shown its resolve over the years not to be diverted from its primary purpose. It has demonstrated flexibility in some contexts and directed funding to 'early action' and some tightly defined areas of preparedness where the life-saving criteria are met. Such funding that has been allocated this way is, from a global standpoint, so small as to be irrelevant. As a global mechanism, the fund requires UN country teams (UNCTs) and partners to put together joint strategies and joint applications via the CERF. Perhaps the largest point in favour of the use of the CERF for the allocation and disbursement of preparedness funding is that, as a global mechanism, it does not require the in-country presence of OCHA. If the fundamental premise of an expanded CERF was redesigned to allow for preparedness funding as a matter of course, it could theoretically deliver funds across a wide range of contexts. It is extremely improbable, even under these circumstances, that such an instrument could fund a useful proportion of the requirements in a range of contexts. It is more unlikely, however, that it would be accepted by the range of donors and other stakeholders required.

### Consolidated Appeals Process<sup>3</sup>

#### Current usage and suitability for preparedness financing

As appeal documents rather than funding instruments, Consolidated Appeals Processes (CAPs) have been more flexible in adapting to humanitarian trends, and many of them address preparedness in elements or as a theme. CAP guidelines include pre-disaster planning, which in turn includes crisis monitoring and preparation

for emergency relief management as a potential area for focus. Country representatives are requested to communicate regularly with updates of preparedness activities. Furthermore, guidelines include assessments to determine the scope of the emergency or potential emergencies. Based on the scope of the activities listed in the mid-year reviews, the CAPs seem effective at fulfilling these guidelines. CAPs contain a somewhat broader range of activities across the matrix than the individual instruments. These have included early warning and hazard risk analysis; legislative frameworks; inter-agency coordination; contingency preparedness and response planning (including community preparedness); training opportunities; and stockpiling and pre-positioning.

Preparedness components most frequently identified within the country reviews were contingency preparedness and response planning; training opportunities; and stockpiling and pre-positioning. Within contingency preparedness and response planning, reported activities included the development of contingency and response plans, capacity building for preparedness and response, and vaccinations and immunization. This category had the broadest level of engagement, with seven countries reporting preparedness activities attributed to contingency preparedness and response planning. The categories for training opportunities and stockpiling and pre-positioning also had relatively high levels of engagement through the CAP, with reports of preparedness activities in 5 countries in each category.

#### 2012 CAP funding

Table 4 provides a breakdown by country, based on achievements reported in the 2012 CAP Mid-Year Reviews.

#### Preparedness within the CAP

In Sudan, CAP funding went to a number of sectors looking to build up the capacity of the international system, in conjunction with technical ministries of the Sudanese Government. These included: capacity building for preparedness and response to health crises; strengthening the capacity of the Ministry of Health in order to identify, prepare for, and respond to nutrition problems in emergencies (UN and Partners, 2012: 25); the pre-positioning of seeds and tools for food security and livelihoods interventions; pre-positioning of medical kits for health interventions; the pre-positioning of food for nutrition; preparation for refugees in a 'worst case scenario' in WASH. A specific preparedness plan for floods was reviewed and developed, including the training of response teams by WHO, UNICEF and MoH in preparation for the flood season (UN and Partners, 2012: 36). A 'buffer stock' of response items was also put in place.

In Sudan's 2012 CAP, a specific section was dedicated to preparedness, allowing for basic analysis of allocations.

<sup>3</sup> Note that the CAP was replaced by a similar tool in mid- to late 2013: the Strategic Response Plan.

**Table 4. Breakdown of CAP funding by country**

Country	Total appeal (US\$)	Funding received (US\$)	Committed through CERF (US\$)	Committed through CHF (US\$)
Afghanistan	449 million	222 million	9,995,396 (1.9%)	N/A
Central African Republic	124 million	77 million	7,991,212 (8.3%)	5,873,393 (7.6%)
Chad	572 million	356 million	17,064,836 (4.2%)	N/A
Congo	791 million	584 million	31,486,228 (4.9%)	88,872,723 (15.2%)
Djibouti	79 million	40 million	4,019,325 (10%)	N/A
Niger	490 million	313 million	25,309,716 (8%)	N/A
Occupied Palestine Territories	420 million	302 million	N/A	N/A
Philippines	51 million	35 million	6,936,150 (8.8%)	N/A
South Sudan	1.1 billion	788 million	40,044,091 (4.6%)	118,300,000 (15%)
Sudan	1.05 billion	579 million	20,158,449 (3.5%)	76,800,000 (13.2%)
Somalia	1.17 billion	612 million	N/A	92,800,000 (15.1%)
Yemen	586 million	338 million	23,460,436 (5.4%)	N/A
Zimbabwe	238 million	210 million	2,006,304 (0.8%)	N/A

Sources: As reported in the 2012 CAP Mid-Year Reviews. All funding figures are taken from OCHA FTS.

The total requirement for those activities clearly identifies as preparedness was US\$13.2 million (approximately 1.25% of the total appeal). By the mid-year review, US\$6,157,000 had been committed against this total (approximately 1.3 % of total funding (US\$457,990,468) received at that point) (UN and Partners, 2012: 26).

The mid-year review of the CAP noted that, in terms of achievements: a preparedness plan was produced for the South Sudanese returnees and the high-risk border areas. The plan included life-saving emergency WASH supplies, which were expected to be pre-positioned to support a potential caseload of 1,965,000 people in the states covered by the contingency plan.

For other CAPs with preparedness, less disaggregated financial data is available. In general, it is only possible to track preparedness activities through specific references in CAP documents and reports.

Via the CAP in Afghanistan in 2012, funding was directed to flood preparedness workshops; the pre-positioning of health supplies and establishment of emergency health teams. It also contributed to the establishment of a National Contingency Plan and inter-agency contingency plans for conflict, floods, landslides and earthquakes. In Djibouti, the CAP supported the WASH cluster for planning in emergency preparedness and response. In Chad, funding via the CAP helped to developing local support through contingency plans for natural disasters and for the health sector, and the procurement of 22 cholera kits provided to high risk health districts.

In Kenya, 80% of projects funded via the CAP incorporated early recovery and DRR components (EHRP, 2012: 26). These included rain assessments for food security; the drafting of a law for DRM and the training of MoE officials in DRM. It is impossible to estimate, however, how much funding was directed specifically to preparedness. In the Philippines, community-level training for DRR and emergency preparedness was piloted in order to build community resilience. In South Sudan, the CAP included a significant amount of preparedness planning. This included the pre-positioning of supplies in regions likely to be cut off by rains and flooding; and a revision of the South Sudan Humanitarian Contingency Plan to ensure that preparedness plans adequately address potential fallout from the border conflict with Sudan. In education, there was an ongoing process of mainstreaming of risk reduction, and in WASH, a process of system-wide preparedness and technical capacity to respond to a potential deterioration of the humanitarian context. In Somalia, as evident from the funding provided by the CHF, the CAP had a significant emphasis on preparedness including: AWD and cholera prevention and preparedness in high-risk areas; the vaccination of 8 million animals (livelihood protection); 1500 teachers and facilitators trained in disaster preparedness and awareness; 300 community education committees trained in DRR; and contingency plans for 12 districts, including the provision of early warning action system in place.

The Occupied Palestine Territories CAP includes the training of community members and health providers in emergency preparedness and the strengthening of WASH

cluster partners' capacity for preparedness. In Yemen, funding via the CAP was allocated to contingency plans at national level and within conflict areas (north and south), leading to changes in stockpiling, human resource allocation and new programming; sectoral preparedness and response plans; and stock-piling of critical supplies.

In Zimbabwe, the WASH sector reported US\$2,858,626 in funding at mid-year for emergency preparedness and response; and US\$3,734,484 in funding at mid-year for emergency preparedness and rapid response in health including assessment of typhoid risk factors and outbreak preparedness. The protection cluster focused on thematic preparedness contingency plans; early warning indicators; province-level training in DRR; and district-level DR workshops.

## Conclusions and looking forward

Table 5 summarises the activities from the matrix covered by the various instruments and CAPs from the reports reviewed above. This table cannot be viewed as wholly representative of each instrument, nor comprehensive. In most cases, instruments are simply not judged against their performance in preparedness, having no requirement to do so. Standard definitions of preparedness are not used across the reports. This is evident when two reporting mechanisms on the use of the same instrument in the same country (for example the use of the CERF in Djibouti) identify two mutually exclusive sets of preparedness activities. That said, the broad areas that appear to be addressed by each mechanism are not coincidental.

Although there are numerous exceptions in specific contexts, CAPs and humanitarian instruments tend to support preparedness in a narrow sense. With a focus on community-level preparedness; contingency and response planning; stockpiling of relief supplies (including the securing of pipelines); and training with a view to build the capacity of national actors for response.

The analysis of reports and evaluations shows that there are frequent calls for mechanisms to be adapted, expanded or for guidance and rules to be changed. These come in recognition that preparedness is under-served and under-funded in general. Obviously, looking to humanitarian instruments to offer a solution to this problem in general avoids the real problem – donor behaviour in addressing preparedness as part of risk reduction in the broader sense.

### Challenges for expansion

The challenges for expansion of the CERF are spelled out throughout the analysis above. Of all of the instruments, it is the most specialised, regulated and the most 'mature',

not least because of its prominent positioning in New York and persistent donor attention to ensure its functioning and improve its monitoring and evaluation framework. The bureaucratic challenges alone of expanding the CERF make it unfeasible. As a humanitarian mechanism, it adheres to strict principles and it spreads its wealth quite thinly beyond a few key countries. Simply put, the authors of this report would not recommend expanding the role of the CERF to include preparedness under any circumstance that can be thought of, even hypothetically.

CAPs already contain preparedness in some elements or as a theme, and their guidance supports this inclusion. The authors' own understanding is that a proposal is being formulated in Geneva to have preparedness as one of five themes in a new CAP format. The authors of this report do not think that there are any key challenges to taking forward this thinking. As noted above, a stronger element or focus of preparedness in CAPs is not guaranteed to alter donor behaviour in general or in any given country.

The analysis shows that ERFs fund preparedness in a number of contexts and across a range of activities. As above, it is felt that with a limited degree of central control, they have been allowed to adapt to context. As such, where the context dictated or allowed, they have adapted to fund preparedness. As noted, ERFs operate in a number of contexts, essentially in any country where OCHA retains a full office. In a similar fashion to CHFs, ERFs in conflict contexts will likely be limited to a small range of activities. Where ERFs exist in non-conflict contexts and other conditions are favourable, ERFs can and do fund preparedness activities. When conditions exist for development norms to operate, the role for ERFs in preparedness would need to be examined carefully in context.

Context aside, the greatest argument against ERF involvement in preparedness is scale: either the absolute quantity of funding available via the mechanism, or the amount available once the Fund has served its primary purpose of flexible disaster response. Ethiopia's HRF is the largest ERF currently, and could be taken as a model for the potential of ERFs at a greater scale. While it does some innovative funding for preparedness, its fundamental nature as response fund, and the quantity of funding available at any given time, precludes preparedness as a key focus. The Fund has made contributions to preparedness in ways that support joint action by the international system, filling key gaps and pipelines on an opportunistic basis. As with any ERF, these activities could be expanded, but it would require a fundamental change in its nature. In Ethiopia, the authors would argue that such a change would be rejected by the Fund Managers on the basis that the Fund fills a recognised gap and it would quickly come into competition with a development sector already focused on resilience and risk reduction,

**Table 5. Summary of activities from the matrix covered by the various instruments and CAPs**

Preparedness matrix – Categories of emergency preparedness	ERF	CHF	CERF	CAP
<b>Hazard/Risk Analysis and early warning</b>				
Early warning systems	✓	✓		✓
Hazard / Risk Analysis (CERF, CAP)			✓	✓
<b>Institutional and Legislative Frameworks</b>				
Institutional and Legislative Frameworks, Resource Allocation and Funding Mechanisms				✓
National Plan of Action, National Platform, National Disaster Management Authority	✓			
Regional agreements				
International agreements				
<b>Resource Allocation and Funding</b>				
National and regional risk pooling mechanisms				
International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)				
<b>Coordination</b>				
Government Coordination mechanisms				
National / sub-national Leadership structures				
Inter-Agency Coordination – national and sub-national				✓
Cluster / sector established contextual standards				
<b>Information Management and Communication</b>				
Information management systems – national, regional and international				
Communication systems		✓		
Cluster and sector information management systems – GIS, 3/4W's				
<b>Contingency Preparedness and Response Planning</b>				
Community preparedness	✓	✓	✓	✓
Contingency / Preparedness and Response Planning	✓	✓	✓	✓
<b>Training and Exercises</b>				
Simulations, drills – with the presence of national and / or international actors	✓			
Accredited training opportunities				
Specific country context training opportunities	✓	✓	✓	✓
<b>Emergency Services/Standby Arrangements</b>				
Stockpiling – national, regional and international	✓	✓	✓	✓
Civil Protection, Emergency Services, Search and Rescue	✓			

Notes: \* 'Services' here goes beyond fire engines and ambulances to cover being prepared to provide many other services, such as mobile health teams to cover displaced populations, emergency water supply, or psycho-social support.

and the Government, who grudgingly allow the Fund to operate.

In short ERFs have funded preparedness on an opportunistic basis and at a minute scale overall. To

alter the rules to encourage the consistent funding of preparedness, or to significantly increase the scale, would be to alter their fundamental nature to the extent that they would no longer have the key characteristics of CHF's.

## Moving forward

The extent to which humanitarian funding instruments will be able to channel funds for preparedness will always be limited. Any discussion on extending the use of humanitarian funding instruments should ultimately begin with donors. Reviews and reports on the humanitarian funds regularly show that the Funds adapt to the absence of more suitable funding streams for preparedness, whether pooled or bilateral. The prevailing problem appears to be the gap between the humanitarian and development channels of the larger donors, and the lack of multi-year funding to operate in the grey zone where neither set of architecture is fully dominant.

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# Financing of emergency preparedness and the Global Facility for Disaster Reduction and Recovery (GFDRR)

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## Emergency preparedness and GFDRR

### Introduction

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a partnership of 41 countries and 8 international organisations, whose stated mission is to assist developing countries to reduce their vulnerability to natural hazards by mainstreaming disaster risk reduction (DRR) and climate change adaptation (CCA) change. While their mission relates to both DRR and CCA, GFDRR's three main tracks to achieve its mission of mainstreaming DRR and CCA in country development strategies (through the support of country-led and managed implementation of the Hyogo Framework for Action (HFA)) can be seen as DRR focused.

- Track I (US\$5 million per annum since FY07): Previously jointly run by World Bank and the United Nations Office for Disaster Risk Reduction (UNISDR), GFDRR enhances global and regional advocacy; strategic partnerships and knowledge management for mainstreaming disaster risk reduction; and promotes the standardisation of hazard risk management tools, methodologies and practices (GFDRR, 2013d).
- Track II: The Disaster Risk Reduction Mainstreaming Programme supports mainstreaming disaster risk reduction and adaptation to climate change in a broader country development agenda, through upstream policy dialogue and technical advice, as well as at the project level (typically with three-year technical assistance programmes, to strengthen disaster risk management institutions and to enhance capacities and investments in risk assessment, mitigation and financing) (GFDRR, 2013f).
- Track III: GFDRR supports sustainable recovery through its 'Disaster Risk Reduction in Recovery' business line, which is deployed in post-disaster situations for early, post-disaster recovery in low-income countries through its Standby Recovery Financing Facility (SRFF). It aims to build national capacity and facilitate knowledge management through two financing windows: the technical assistance fund supports damage, loss and needs assessments, and develops national capacity for recovery planning and implementation; the callable fund enables accelerated

recovery to provide speedy access to financial resources for disaster recovery and reconstruction (GFDRR, 2013i).

### Emergency preparedness activities and GFDRR

GFDRR provides small grants and technical assistance to lay the foundation for countries to leverage larger investments in DRM. The GFDRR Secretariat (30 specialists hosted in the World Bank) acts as trustee of financial resources contributed by donors (awards and manages grants, reports on results, outreach and partnership development). The Secretariat also acts as the support hub for a decentralised network of DRM expert focal points in priority countries. These specialists play a leading role in locally managing the GFDRR programme and in developing relationships with governments and other in-country partners. GFDRR is responsible for allocating funds entrusted to it in line with geographic and thematic priorities set by its donors and partners. In any given country, GFDRR adopts a number of criteria to help in allocating resources, including: established vulnerability indicators; past evaluation of impact; the political context (including existing relations with governments); and donor priorities (GFDRR, 2013e; IEG, 2012).

Since 2007 (GFDRR, 2013g, 2013h; IEG, 2012), GFDRR has committed US\$63.4 million for single-country projects in focus countries. Grant making has increased from US\$6.4 million in fiscal year FY07 to US\$46.7 million in FY12. Financial resources are administered as grants to government agencies, their development partners, technical bodies and NGOs, and are typically one to three years in duration. Throughout, the Secretariat judges all grant proposals on their potential to leverage investment or institutional reform and behaviour change for improved management of disaster risks. Programmatic resources have been allocated to a total of 97 projects (48 active and 49 completed), with the average programme allocation per country to date being US\$2.2 million. Individual project size is within the range of US\$25,000 (i.e. capacity building for post-disaster needs assessment (PDNA) in Bangladesh) to US\$3.04 million (i.e. rehabilitation in Cyclone Sidr-affected areas in Bangladesh). In addition to single-country engagements, GFDRR has also supported

95 multi-country projects that cover at least one focus country, for a total amount of US\$56.2 million.

GFDRR reports (GFDRR, 2013c) that for every dollar it spends, 69¢ of funding is spent on mainstreaming DRR and CCA (i.e. Track II), 17¢ on global and regional partnerships (i.e. Track I), and 14¢ on sustainable recovery (i.e. Track III). For track II, 80% is spent on priority country programmes and 20% on innovative grants or global knowledge products.

### Fund structure

Track I is currently financed with US\$5 million per year from the World Bank's Development Grant Facility (DGF) (GFDRR, 2013a). Track II includes core funds, non-core funds and South-South Cooperation grants. Core funds are provided through a multi-donor trust fund (MDTF) for mainstreaming DRR in country strategies. Participating countries are: Australia, Brazil, Canada, Denmark, European Commission, France, Germany, Ireland, Italy, Japan, Luxembourg, Norway, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom and the United States of America. Non-core funds are provided through single-donor trust funds (SDTF) to give donors an opportunity to specifically designate certain countries as beneficiaries of their contributions (requests must be approved by the GFDRR Secretariat). There are currently three SDTFs (Spain, Japan and Australia). South-South Cooperation grants (provided by Italy and Norway) aim to strengthen the leadership role of developing countries in finding effective and efficient risk reduction and climate change adaptation solutions. Track III comprises 2 MDTFs (technical and recovery planning) funded through a multi-annual contribution from Luxembourg and Norway.

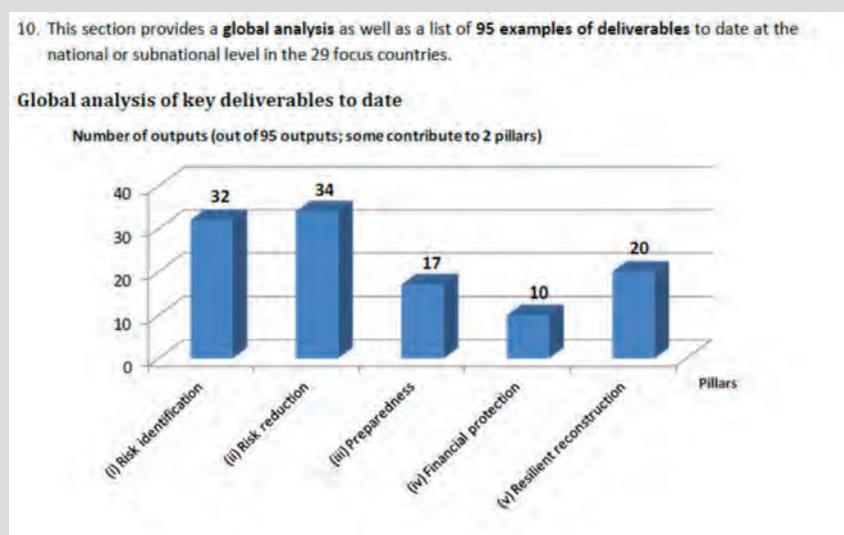
In post-disaster situations, Australia, Brazil, Denmark, the European Commission, Italy, Luxembourg, Sweden, and Switzerland have contributed to the Standby Recovery Financing Facility (SRFF).

In 2011, the European Union and GFDRR/World Bank signed a financial agreement on 9 May 2011 for the ACP-EU Natural Disaster Risk Reduction Programme (54.5 million Euro) which is aimed at assisting disaster-prone countries in the Africa, Caribbean and Pacific (ACP) regions around four priority areas that reflect the three-track structure of the GFDRR MDTF (and are considered part of the main tracks for reporting purposes), but is a stand-alone SDTF (European Commission). Activities relate to: (i) mainstreaming DRR; (ii) risk identification and assessment; (iii) early warning systems and communication on DRR; and (iv) risk transfer and integration of DRR into recovery. It will also establish a fast-track recovery instrument to support ACP countries in the aftermath of disasters (GFDRR, 2011).

Figure 1 shows the focus on emergency preparedness pertains mainly to early warning and technical capacity for risk identification, as well as risk reduction (risk mapping, technical modelling, informational or financial tools, institutional and technical capacity, and training). Five pillars of action were set out in the 2014–2016 Strategy and Work Plan to guide activities of the GFDRR (GFDRR, 2013h):

- Pillar 1: Risk Identification** These deliverables are often used as inputs to drive major political developments (e.g. planning, building codes), investments, or technical programmes (e.g. urban, agriculture, transportation, water resources, risk financing). Most recurrent examples include (i) risk assessment methodologies and products (e.g. hazard,

**Figure 1. GFDRR country updates: breakdown of allocation of projects per thematic pillar of the GFDRR**



Source: GFDRR, 2012a.

exposure and vulnerability mapping; future scenarios; loss probabilities; risk indices); (ii) forecasting and modelling tools and products; (iii) technical and cost-benefit analyses of DRR measures; (iv) disaster risk information systems; (v) assessment of institutional or technical capacities; and (vi) training for risk identification.

- **Pillar 2: Risk Reduction** Examples include (i) policies, strategies, action plans, operational manuals, and road maps, either cross-cutting or sector-specific, with enhanced disaster risk consideration; (ii) urban and land use plans; (iii) building norms and standards; (iv) scoping, identification, and design of DRR measures and project components; (v) DRR coordination mechanisms; (vi) risk reduction budget-classifying tools; and (vii) DRR-related education, awareness, training and guidelines.
- **Pillar 3: Preparedness Design**, implementation or strengthening of (i) early warning systems; (ii) contingency and social protection plans and funds; (iii) response plans (protection and evacuation, search and rescue); (iv) training and simulation exercises; and (v) institutional strengthening for preparedness.
- **Pillar 4: Financial Protection** (i) risk financing and insurance feasibility studies; (ii) design and support for risk financing and insurance products; and (iii) policies and strategies for financial protection.
- **Pillar 5: Resilient Reconstruction** Mostly funded by the Standby Recovery Financing Facility (Track III) and provided in the form of technical assistance, with six subcategories: (i) post-disaster needs assessments; (ii) strategies and plans for resilient reconstruction; (iii) analysis of lessons learned from past recovery and reconstruction projects; (iv) training (and training of trainers) for PDNA and resilient reconstruction; (v) design or management support for recovery and reconstruction funds; and (vi) other emergency support in the aftermath of disasters (debris management sites, cholera-related sanitation programmes, etc.).

### Examples of good practice in funding emergency preparedness

In Niger, at the request of the highest level of government, GFDRR is working with the Prime Minister's office to develop a legal, governance and operational framework for emergency preparedness (US\$0.3 million). The GFDRR is also working together with the African Development Bank (AfDB) and United Nations Development Programme (UNDP) (GFDRR, 2012a). The investment includes defining roles and responsibilities, and ensuring institutional collaboration for hazard monitoring and forecasting, development of risk-informed early warning bulletins, information sharing and dissemination, and the activation of emergency response plans (covering many of the typical emergency preparedness activities). In Haiti, the 'Disaster Recovery and Vulnerability

Reduction Programme' (US\$1,640,895) was completed in 2011. The project developed the concept for a central disaster risk management coordination unit interacting with disaster risk management units within key line ministries. Since 2011, GFDRR Track 3 support (US\$199,036) has rapidly provided support for the design and delivery of a programme to 'train the trainers' and a social communication programme, which has also been scaled up by a US\$15 million IDA project (GFDRR, 2012a).

### Country selection for emergency preparedness

GFDRR funds activities in 43 disaster-prone countries,<sup>1</sup> selected through the GFDRR's funding eligibility criteria (risk and vulnerability indicators with consideration for geographical representation) (GFDRR, 2013h). In addition, GFDRR has prepared comprehensive programmes of support in disaster risk management for 20 priority countries<sup>2</sup>, 11 donor-earmarked countries (GFDRR, 2009) and the ACP-EU Programme countries (SDTF) (GFDRR, 2012c). Core priority countries (endorsed by the Consultative Group (CG)) are financed primarily through the multi-donor trust fund; non-core countries prioritised by specific donors are financed primarily through SDTFs, and other countries are financed with flexible funds or special initiatives (such as the ACP-EU programme) (GFDRR, 2013h). Currently 70% of GFDRR's funding is invested in priority countries, with the remaining 30% used flexibly across the full suite of countries. Priority countries are financed out of the MDTF and donor-earmarked countries<sup>3</sup> are financed by 3 SDTF (Australia, Spain and

<sup>1</sup> Algeria, Bangladesh, Benin, Bhutan, Bolivia, Colombia, Burkina Faso, Costa Rica, Djibouti, Ecuador, El Salvador, Ethiopia, Ghana, Guatemala, Haiti, Honduras, Indonesia, Kenya, Lao PDR, Madagascar, Malawi, Mali, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Philippines, Rwanda, Samoa, Senegal, Solomon Islands, Somalia, South Africa, Sri Lanka, Togo, Uganda, Yemen.

<sup>2</sup> At its 5th meeting (Copenhagen, 2008), the GFDRR Consultative Group asked the secretariat to focus on a select group of priority countries to achieve increased impact. In GFDRR's Track II, this led to a prioritisation of operations in 20 core countries, namely Burkina Faso, Djibouti, Ethiopia, Ghana, Haiti, Indonesia, Kyrgyz Republic, Madagascar, Malawi, Mali, Marshall Islands, Mozambique, Nepal, Panama, Papua New Guinea, Senegal, Solomon Islands, Togo, Viet Nam and Republic of Yemen. The countries were selected due to their high vulnerability to natural hazards and low economic resilience to cope with disaster impacts, including anticipated climate change and variability. Two thirds of the countries are least developed countries and twelve are highly indebted poor countries. Nine are from Africa and several others are small island states at high risk. These 20 core countries will receive 80% of available funds while 20% will be made available for flexible, innovative, high impact grants, such as those that catalyse increased investment programmes and integration of disaster risk reduction and climate change adaptation in development in any disaster-prone country.

<sup>3</sup> Bangladesh, Colombia, Costa Rica, Ecuador, Guatemala, Lao PDR, Mongolia, Pakistan, the Philippines, Sri Lanka, Vanuatu (<https://www.gfdrr.org/node/156>).

**Table 1. Preparedness matrix demonstrating aspects of emergency preparedness addressed by the GFDRR**

Preparedness matrix: categories of emergency preparedness		To what extent are these mechanisms currently being used for EP activities?
Hazard / risk analysis and early warning	Early warning systems (local, national, regional and international) Hazard and Risk Analysis	Preparedness (Pillar 3) and Risk Identification (Pillar 1) Support the creation, rehabilitation, and maintenance of economic, social and institutional infrastructure, more climate resilient land and water management and agricultural systems, and improved access to weather-related information; Provide loans or grants for investment in public and private projects that need to consider the risks and impacts of natural hazards from non-climate risks, climate variability and climate change. Example: GFDRR hydromet team recently provided technical and advisory support to a national 'Managing Natural Hazards' project, which includes a US\$30 million investment to strengthen weather forecasting and early warning (GFDRR, 2013h).
Institutional and legislative frameworks	Institutional and Legislative Frameworks Resource Allocation and Funding Mechanisms National Plan of Action National Platform National Disaster Management Authority Regional agreements International agreements	Risk Reduction (Pillar 2) Financial Protection (Pillar 4) E.g. GFDRR-supported Probabilistic Risk Assessment (CAPRA) Programme aims to strengthen the capacity of governments to assess, understand and apply disaster risk in development policies and programmes (GFDRR, 2013h).
Resource allocation and funding	National and regional risk pooling mechanisms International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)	Financial Protection (Pillar 4): GFDRR Disaster Risk Financing and Insurance (DRFI) Programme (e.g. micro-insurance programmes, intermediating between governments and international financial markets, national catastrophe loans (CAT DDO)) (GFDRR, 2013b). ACP-EU (Window 3): Establishing a fast-track recovery instrument (such as PDNA, supporting ACP countries in the aftermath of disasters with rapid technical assistance to build back better, build ex ante capacity for post-disaster needs assessment and foster DRR mainstreaming in recovery planning. Example: GFDRR's work with the Indian Ocean Commission (IOC) to develop a detailed risk assessment platform to guide risk management interventions, including financial protection strategies; technical support to reform the National Agricultural Insurance Scheme (NAIS) (GFDRR, 2013h).
Coordination	Government Coordination mechanisms National and sub-national leadership structures Inter-Agency Coordination – national and sub-national Cluster- and sector-established contextual standards	Risk Reduction (Pillar 2) ACP-EU (Window 1): Strengthening regional and sub-regional cooperation to advance ACP countries' national DRR agendas.
Information management and communication	Information Management systems – national, regional and international Communication systems Cluster and sector information management systems – GIS, 3/4W's	Risk Identification (Pillar 1) E.g. Understanding Risk (UR) & Open Data for Resilience Initiative (OpenDRI); work in Djibouti to establish a comprehensive risk assessment and communication platform (GFDRR, 2013h).
Contingency preparedness and response planning	Community preparedness Contingency preparedness and response planning	Preparedness (Pillar 3) Example: GFDRR supported the city authorities of Dakar in the design of a large-scale investment programme to protect communities from recurrent floods and storm surges (GFDRR, 2013h).

**Table 1 (continued). Preparedness matrix demonstrating aspects of emergency preparedness addressed by the GFDRR**

Preparedness matrix: categories of emergency preparedness		To what extent are these mechanisms currently being used for EP activities?
Training and exercises	Simulations, drills – with the presence of national or international actors, or both Accredited training opportunities Specific country-context training opportunities	Preparedness (Pillar 3) ACP-EU (Window 2): Providing need-based and demand-driven technical assistance for DRR and climate adaptation policy development and its implementation, including provision of technical advisory capacity in ACP countries. GFDRR support in Burkina Faso for the development of local contingency and emergency preparedness plans and linking these plans to community-based preparedness planning, including drills and simulation exercises (GFDRR, 2013h). From 2007 to 2011, GFDRR offered 169 training and learning events, reaching more than 14,400 policy-makers and technical experts. These trainings equip governments with the tools, skills, and knowledge needed for improving and strengthening their recovery preparedness and response systems (GFDRR, 2013h).
Emergency services and standby arrangements and pre-positioning	Stockpiling – national, regional and international Civil Protection, Emergency Services, Search and Rescue Contingency partnership agreements – national, regional and international	Preparedness (Pillar 3): strengthening civil protection.

Japan). In FY12, GFDRR approved 22 projects, worth US\$20.3 million, and disbursed a total of US\$27.5 million through its trust fund to support the integration of DRM in development, providing targeted grant financing, knowledge products and technical assistance to disaster-prone countries (GFDRR, 2012a).

Examples of activities currently financed by GFDRR that relate to emergency preparedness activities are shown in Table 2.

## Evaluating GFDRR

### Summary of evaluations

Three evaluations of the GFDRR (Universalia, 2010; DFID, 2011; IEG, 2012) provide insights into the effectiveness of the mechanism, its position as a key multilateral organisation for bridging the funding gap between humanitarian response and reconstruction (including building back better post-disaster) and the comparative advantage of the involvement of the World Bank. The IEG also found the supply-side and the demand-side relevance of GFDRR's objectives to be respectively substantial and high.

### Leveraging

GFDRR-funded analytical work and technical assistance is often used as a basis for leveraging World Bank, Government and other partners' investments in DRM, and for incorporating disaster resilience in the preparation of

activities. GFDRR-supported mainstreaming of DRM in the World Bank's assistance strategies and operations, and in the country's own development planning helps leverage investments on a broader strategic level. Leveraging has also been an important means of securing investments for structural and non-structural risk reduction measures. GFDRR has successfully fostered and improved linkages between country offices, the World Bank Group and external partners to strategically leverage knowledge and funds (World Bank finance, just-in-time seed funding, targeted investments, partnering arrangements, resources and expertise). This has allowed the World Bank to expand their DRR work through greater provision of country-level technical assistance to client countries.

### Mainstreaming DRR

Quantitative and qualitative improvements could be seen in the treatment of DRR since 2006, with a clear shift toward risk reduction in World Bank-supported investment projects and increased focus on pre-DRR that has enabled donors to extend the reach of their DRR activities.

### Enabling environment

There were high calibre staff with: knowledge of key DRR issues; strong country presence; ability to foster linkages and partnerships between country offices, the World Bank Group and external partners; ability to achieve results on the ground (generate, validate and communicate innovative solutions to DRR management challenges); and success in fragile states and in supporting fragile governments.

**Table 2. Examples of activities currently financed by GFDRR that relate to emergency preparedness activities**

Project description (GFDRR, 2012a)	Indicative costs/leverage	Country	C. EP
<p>Hydromet team provided technical and advisory support to a national 'Managing Natural Hazards' project, which includes a US\$30 million investment to strengthen weather forecasting and early warning.</p> <p>GFDRR provided technical and financial support to the design and implementation of a government community-based preparedness programme, which targets 6,000 of the most vulnerable communities in the country.</p>		Vietnam	<p>Hazard and risk analysis and early warning</p> <p>Contingency preparedness and response planning</p>
<p>GFDRR will work with DMA, the Lesotho Meteorological Services, and the Ministry of Energy, Meteorology and Water Affairs to support the establishment of an early warning system and to provide the technical support and capacity development needed for better lead times for decision-making. In parallel, GFDRR will support the establishment of an Information Management System to ensure information can be managed more effectively across institutions.</p>	US\$0.5 million	Lesotho	<p>Hazard and risk analysis and early warning</p> <p>Institutional and legislative frameworks</p>
<p>GFDRR will support CONASUR to enhance the country's preparedness and response capacity. Key priorities include the development of local contingency and emergency preparedness plans; linking the plans to the early warning system; and community-based preparedness planning, including drills and simulations exercises.</p>		Burkina Faso	<p>Contingency preparedness and response planning</p> <p>Training and exercises</p>
<p>GFDRR has been working with MARD and WFP to develop a weather-based index for triggering emergency financing (LEAP) to strengthen Ethiopia's Productive Safety Net Programme. As a result, currently Ethiopia's National Meteorology Agency receives real time weather data every 15 minutes which allows it to quantify and index drought and excessive rainfall. GFDRR will support the further refinement, development and validation of LEAP, as well as the development of capacity at national and sub-national levels to implement the Index.</p>	US\$0.7 million.	Ethiopia	<p>Hazard and Risk Analysis</p> <p>Information Management Systems</p> <p>Funding Mechanisms</p>
<p>A GFDRR funded Damage and Loss Assessment and subsequent technical assistance in the aftermath of Tropical Storm Ida, led to a Catastrophe Deferred Drawdown Option (CAT DDO) to the Government of El Salvador, approved in February 2011.</p>	The instrument allowed El Salvador to access US\$50 million after catastrophic flooding last year.	El Salvador	<p>Information Management Systems</p> <p>Funding Mechanisms</p>
<p>GFDRR will work with the DPC to improve disaster preparedness by modernising the country's evacuation shelter network and engaging local communities in mapping and emergency planning. GFDRR will partner with universities in Haiti, the United States and Europe to provide innovative solutions and develop methodological approaches for the improvement of evacuation shelters. This includes examining and documenting best practices for evacuation shelters and systems, feeding this knowledge into innovative designs that reflects the Haitian context, and evaluating the effectiveness of current evacuation systems and policies.</p>	<p>US\$0.2 million</p> <p>Expected to guide a US\$6.5 million investment in the construction of emergency shelters, and US\$6.0 million in preparedness activities at community level.</p>	Haiti	<p>Contingency preparedness</p> <p>Emergency services and standby arrangements</p>
<p>The Master Plan (technical assistance from GFDRR) for Flood Management in Metro Manila identifies structural and non-structural investments to protect residents from floods with up to a 100-year return period. In 2012, the Government allocated US\$120 million for immediate investments for some of these proposals. In parallel, the Government of the Philippines and the World Bank signed a Catastrophe Drawdown Option (CAT DDO) to provide contingent financing up to US\$500 million in case of a disaster, attached to a DRM-specific Development Policy Loan (DPL), which was triggered and fully disbursed after Tropical Storm Sedong (2011).</p>	<p>US\$1.65 million technical assistance from GFDRR.</p> <p>Leveraged investment: US\$120 million &amp; US\$500 million (in case of disaster).</p>	Philippines	<p>Hazard and risk analysis</p> <p>Institutional frameworks</p>

Source: Country Updates (GFDRR, 2012a).

## Monitoring & Evaluation

There was criticism of the GFDRR's reporting, monitoring and evaluation, and the generation of standardised and formalised selection criteria. Evaluators also stated that there was a need to provide donors with a more detailed analysis of the reasons for the unused contributions and for implementation delays. In response to these challenges, the GFDRR has now published an updated Results-Based Management System (RBMS) in the 2014–2016 Work Plan (GFDRR, 2013h). Furthermore, it should be noted that formal project selection tends to occur only after a lengthy and rigorous development process with the GFDRR secretariat.

## Risk and emergency preparedness in GFDRR

GFDRR effectively finances emergency preparedness in a number of the most vulnerable countries (including fragile and conflict-affected states), but does not specifically address emergency preparedness for conflict. In terms of natural hazard disaster risk preparedness, GFDRR's operating model has been seen to be successful in terms of achieving its primary aim. i.e. to integrate, mainstream and coordinate DRR and CCA in PRSs, CASs, UNDAFs and NAPAs. GFDRR is also seen as having a unique role in helping to bridge knowledge, policy and practice in DRR services. All the evaluations (DFID, 2011; IEG, 2012; Universalis, 2010) pointed to GFDRR's comparative advantage in terms of providing technical and financial assistance that is integrated with the World Bank's country operations, effectively drawing on the Bank's long experience in disaster-related assistance, and successfully utilising technical and institutional capacity development to leverage further investment at the broader strategic level, as well as for structural and non-structural programmes. However, improvements to the RBMS and a more coherently articulated programme logic are seen as requirements to improve the design of the GFDRR (IEG, 2012).

While the evaluations do not refer to emergency preparedness specifically, both DFID and IEG suggest that GFDRR could further improve the joined-up approach, as well achieving a clearer and more coherent set of objectives relating to CCA and DRR, stating that CCA is still not yet fully integrated into the Bank's work, although climate change analysis does underpin a lot of GFDRR's actions. IEG further states that there remains a need to better align the support at national and local levels (the core of DRR activities) with knowledge and regional coordination at global and regional level. Despite GFDRR not explicitly addressing emergency preparedness for man-made disasters or conflict situations, it does have a remit for preparedness for natural hazard-related disasters in fragile countries and countries with *de facto* governments. For example, GFDRR does have tentative links with the Centre on Conflict, Security and

Development in the World Bank, most notably engaging on recovery in the Horn of Africa and the Sahel (World Bank, 2013). Furthermore, GFDRR, through the World Bank, has the requisite policies in place to operate in post-crisis and conflict areas (World Bank, 2007, 2013) and with *de facto* governments (World Bank, 2001). In addition, the mandate exists to improve the Bank's operating model in fragile and conflict-affected situations (World Bank, 2011). The facility therefore has the ability to be active in conflict areas and with *de facto* governments, and could be able to be more active in DRR in fragile states (World Bank, 2001, 2007, 2013). However, there is no mandate to expand into conflict preparedness, and any expansion into conflict preparedness would probably overlap with other sections of the Bank, and is therefore very unlikely at this point (GFDRR, 2013e).

## Evaluating emergency preparedness opportunities

The GFDRR aims to scale up its current engagement, both financially and geographically (GFDRR, 2013h). The FY14–16 Workplan will require a projected envelope of US\$260 million (derived from identified proposed projects in 49 countries and projected needs over the three-year period). GFDRR will require a projected US\$57.2 million to implement activities planned for risk identification, US\$92.1 million for risk reduction, US\$46.1 million for preparedness, and US\$23.4 million for financial protection. Furthermore, the 2014–2016 Work Plan has re-balanced the funding for priority countries (as approved by the CG<sup>4</sup>) from an 80/20 to a 70/30 distribution of funding, and the possibility remains that either GFDRR or a CG member could propose to remove the rule in order to enable a better balance between donor and GFDRR priority countries (subject to CG approval).

Evaluations suggest that the GFDRR should enhance their leadership role in promoting donor and development bank coordination and harmonisation, but notably with

<sup>4</sup> GFDRR's policy and long-term strategy is guided by its Consultative Group (CG), which is made up of: Official donors contributing at least US\$ 3 million in cash cumulatively over three consecutive years in Track II core funds or Track III funds (as specified in their administration agreements); Recipient or developing country governments contributing at least US\$500,000 in cash cumulatively over three consecutive years in Track II core funds or Track III funds (as specified in their administration agreements); UN International Strategy for Disaster Reduction (UNISDR) as a non-contributing member; The Chair of the Results Management Council (RMC); The UN Development Program (UNDP) and the International Federation of Red Cross and Red Crescent Societies (IFRC) as permanent observers; and up to six developing country governments, by invitation, on a staggered rotation (<https://www.gfdrr.org/node/60>). The CG meets twice a year and is chaired by the World Bank's Vice President for Sustainable Development, and co-chaired by a donor member. Participating donors of GFDRR Core funds (MDTF) are: Australia, Brazil, Canada, Denmark, European Commission, France, Germany, Ireland, Italy, Japan, Luxembourg, Norway, Spain, Sweden, Switzerland, the Netherlands, the United Kingdom and the United States of America.

specific reference to its priority countries 20 at the time of evaluation (Universalia, 2010). The evaluations also generally suggest that the GFDRR could strengthen national coordinative capacity in the next project cycle, focusing on a programming approach with a more rigorous multi-year strategic plan. DFID further supports its continued role in mainstreaming DRR and leveraging World Bank finance to support the World Bank in playing a stronger role in coordinating donor investment in disaster risk management (DFID, 2011).

GFDRR could capitalise on its performance in natural hazard-related emergency preparedness in fragile areas, such as the Sahel, Horn of Africa, Madagascar and Yemen (GFDRR, 2012a, 2013h), as well as driving implementation of its civil society strategy (DFID, 2011). While the Facility could be more active in conflict areas (World Bank, 2001, 2007, 2013), it is unlikely to expand into conflict preparedness, as this could overlap with other sections of the Bank (GFDRR, 2013e).

## Potential for expansion

### Planned and possible expansion

GFDRR already has the mandate to finance many of the emergency preparedness measures in relation to natural hazard-related disasters (but neither man-made nor conflict related), with a focus on the priority countries. It currently focuses on providing the seed funding for technical analysis that could then leverage larger World Bank credits or loans for structural and non-structural investments. The GFDRR Strategy for 2013–2015 (GFDRR, 2013g) states that GFDRR will scale-up or establish a series of central thematic programmes of support including: (i) OpenDRI; (ii) safe schools and critical infrastructure; (iii) urban resilience; (iv) weather and climate services and early warning; and (v) disaster risk financing (GFDRR, 2012a). Both the Strategy and the GFDRR Workplan 2014–2016 (both endorsed by CG) indicate specific areas for scaling up or expansion (GFDRR, 2013g, h). See Table 3.

In response to demand for DRR financing, GFDRR is seeking to expand and develop its role as a global financing mechanism. The Secretariat is supporting the CG in fundraising to implement GFDRR's mission and the 2014–2016 Work Plan (GFDRR, 2013h), working with partners to better align funding sources for DRM and climate risk management that encourage anticipatory adaptation to long-term climate change threats. By actively engaging non-traditional donors to join as members, GFDRR is diversifying donor coordination and increasing technical cooperation in the CG. In order to implement this proposed expansion, GFDRR will need to

mobilise an increase in funds from US\$46.7 million (FY12) to US\$100 million (FY16) (GFDRR, 2013h).

Furthermore, in line with principles of aid effectiveness, GFDRR is seeking to continue to expand its role as a trustee of pooled funds in support of a common goal to build resilience to disasters and climate change. The facility will continue to harness the potential of large-scale investment projects, including several projects to be financed by the Climate Investment Fund (CIF), to build resilience to climate-related disasters in priority countries (GFDRR will support the development of new hydro-meteorological modernisation projects in Cambodia, Lao PDR, Mozambique, Nepal, Viet Nam and Yemen, representing a minimum investment of US\$105 million in leveraged financing; and exploiting synergies with PPCR in Haiti, Kyrgyz Republic, Mozambique and Nepal) (GFDRR, 2012a, 2013h). In addition to continuing its focus on priority areas relating to CCA, GFDRR aims to support alignment of the DRM and climate adaptation financing agendas by developing an integrated tool that brings the OpenDRI initiative and the Climate Change Knowledge Portal together.

### Pros and cons of emergency preparedness expansion

#### Pros

The GFDRR's technical assistance and funds enable capacity to be built for analysing and managing disaster risks which can then leverage further, larger-scale financing for emergency preparedness in relation to post-disaster investments in institutional and built infrastructure. In the process of project development, the facility is also engaged in continuous dialogue with relevant Ministries, enabling relatively small GFDRR investments (financial and technical) to stimulate the consideration of disaster risk at the highest levels of national policy-making. At the global policy level, GFDRR is also well positioned to leverage the influence of the World Bank in forums such as the World Bank Group's Spring and Annual Meetings, the UN General Assembly, and the G20, to push the emergency preparedness and DRR agenda to the forefront of the development agenda.

Not only is the overlap between DRR and core activities in the World Bank (World Bank, 2012) recognised, but the GFDRR does have the policies in place to operate (i.e. finance and provide technical support for natural hazard-related emergency preparedness rather than conflict preparedness) in post-crisis areas (World Bank, 2007), conflict areas (World Bank, 2010) and with *de facto* governments (World Bank, 2001) (e.g. see activities in Mali, Yemen, Pakistan, Madagascar). Furthermore, the mandate to improve the Bank's operating model in fragile and conflict-affected situations is relevant to the GFDRR

**Table 3. Specific areas for scaling up or expansion of GFDRR activities**

Preparedness matrix: categories of emergency preparedness	Stated areas of expansion
Hazard and risk analysis and early warning	<p>Support for the application of risk assessment, including through risk modelling, in partner countries (develop capacity for open systems for creating, sharing and using disaster risk and climate change information).</p> <p>Continued and expanded focus on the modernisation and strengthening of national weather and climate services and broader early warning.</p> <p>Modernisation and upgrade of national hydrological and meteorological services.</p> <p>In the next three years, GFDRR will further develop capacity and leverage investment in strengthened hydromet services in disaster-prone countries, with a particular emphasis on Africa.</p>
Institutional and legislative frameworks	<p>Provide need-based and demand-driven technical assistance for DRR and climate adaptation policy development and its implementation (ACP-EU).</p> <p>Resilient recovery and reconstruction policies; ex ante design of institutional response mechanisms.</p>
Resource allocation and funding	<p>Increase support to programmes that increase the financial capacity of the state to respond to emergencies, while protecting the fiscal balance.</p>
Coordination	<p>Strengthen partnerships with other UN agencies where strategic interests are aligned.</p> <p>Implementation of GFDRR Civil Society Partnership Strategy to extend direct outreach to more localised levels of engagement. This will include, wherever possible, engagement with local civil society and sourcing and development of local expertise.</p> <p>Expand a dedicated programme of activities to develop national crisis management structures and early warning systems (national and local coordination mechanisms).</p> <p>Foster links between community-based approaches and larger scale investment in provincial and national preparedness plans, systems and operating procedures.</p>
Information management and communication	<p>Continued and expanded focus on the modernisation and strengthening of national weather and climate services, preparedness and response capacity (shift national discourses on preparedness and early warning).</p>
Contingency preparedness and response planning	<p>Foster links between community-based approaches and larger-scale investment in provincial and national preparedness plans, systems and operating procedures). GFDRR is working to implement its Civil Society Strategy as endorsed at the Meeting of the CG in April 2012. This includes mapping civil society engagements (GFDRR is working with the Global Network for Disaster Reduction to establish an online platform to map CSO actors in DRM that will launch during 2014).</p>
Training and exercises	<p>Implementation of GFDRR's Civil Society Strategy.</p>
Emergency services and standby arrangements and pre-positioning	<p>Expand a dedicated programme of activities to develop national crisis management structures and early warning systems (developing critical capacities, for example in civil protection systems).</p>

(World Bank, 2013). Finally, GFDRR does hold the ability to fund non-government related activities (as long as they are aligned to national priorities via PRSPs and national development plans). Furthermore, its position in the Bank (as also the trustee of the Climate Investment Funds) also allows GFDRR to respond to strategic opportunities to better support the common goal of building resilience to disasters and climate change.

### Cons

GFDRR is highly unlikely to expand into financing man-made and conflict-related emergency preparedness (GFDRR, 2013e). Although the Facility has the ability to be active in conflict areas and with *de facto* governments and could be able to be more active in DRR in fragile states, there is no mandate to expand into conflict preparedness.

Furthermore any expansion into conflict preparedness would probably overlap with other sections of the Bank (e.g. Centre on Conflict, Security and Development) and is at this point therefore very unlikely.

Moreover, there is a recognised funding gap that needs to be filled for the 2014–2016 Work Plan (GFDRR, 2013h). As of April 2013, the balance available for implementation of this Work Plan was US\$67 million (GFDRR, 2012b). The indicative envelope for the Work Plan of US\$260 million accounted against US\$67 million in available resources means that there is a funding gap of US\$193 million, which requires an annual increase in new contributions, from an estimate of US\$15 million in FY14, to US\$78.3 million in FY15, and US\$100 million in FY16 (GFDRR, 2013h).

It is well recognised that GFDRR's financial and operational reporting, monitoring and evaluation process could be improved, and an updated version of the RBMS is already in progress. Any further expansion of the GFDRR (as per the Strategy and Work Plan) would need to be done in a logical, structured and programmatic way, which has perhaps not been as well achieved to date. GFDRR's strategy notes that a key aim is to streamline the existing strategy in order to more clearly articulate the vision, mission, pillars of action and guiding principles of GFDRR (see GFDRR pillars earlier). Finally, GFDRR mainly provides small grants and technical assistance to lay the foundation for countries to leverage larger investments in DRM, limiting its potential to expand in significant financial terms. The mechanism also must follow government priorities, which means that it has limited capacity to steer its own funding trends, but instead must focus on government priorities.

## The challenges of expansion

### Bureaucracy

Given the existence of other Centres in the World Bank recently implemented to focus on conflict and security issues, it is unlikely that the World Bank would be supportive of an expansion of the GFDRR into this area. Although many benefits have been cited for its integration within the World Bank (the facility's position in the Bank provides an opportunity to leverage the financial, political and human resources the institution holds), challenges remain in relation to World Bank rules for providing financing to non-government bodies (i.e. UN and NGOs). It should be noted that the GFDRR is allowed to finance a range of institutions, but that challenges relate to approving this financing for certain organisations (such as civil society groups), who often struggle to meet the World Bank rules on financing for administration, finance and procurement systems.

### Advocacy

GFDRR is seen as relatively effective and efficient; however, key challenges for any expansion are likely to relate to the support of national governments and regions for the prioritisation of further emergency preparedness aspects of DRR, as well as raising increased levels of financing for the next donor cycle in a still challenging global economic environment.

### Management

There is the potential to enhance GFDRR's support of emergency preparedness in conflict areas, fragile states or in areas of conflict prevention, and to create a more enabling environment for GFDRR to finance emergency preparedness activities with *de facto* governments, UN bodies operating in conflict zones, and civil society organisations (CSOs). However, GFDRR has also acknowledged that '*the complexities of operational procedures applicable*

*in "dealing with de facto government" situations have had serious implications for project implementation'* (GFDRR, 2012a). For example, GFDRR-supported activities in Yemen, Madagascar and Mali have all suffered delays due to political instability and emerging crises and conflict (GFDRR, 2013g). In the World Bank, conflict preparedness is the remit of the Centre on Conflict, Security and Development (launched in 2012 to strengthen the Bank's work on fragile and conflict-affected situations)<sup>5</sup> and the Hive Knowledge Platform. While there may be some collaboration in areas such as the Sahel or Horn of Africa, it is highly unlikely that GFDRR would move into or take on elements of the conflict-related mandate.

## Step-by-step approach to expansion

### Potential areas of expansion

1. *Geographical* – While the Strategy states that the Facility will continue to deepen engagement in priority countries, GFDRR does have the potential to expand to more conflict-affected areas, given the extant policies for operating with *de facto* governments and the fact that the list of priority countries (and the current balance of financing for priority countries) is subject to review (guided by internal progress reviews, political factors and the external donor environment).

2. *Relational and financing reach* – In order to expand both international coordination and community-based participation to better cover all emergency preparedness activities, GFDRR does have the potential to build on current engagements, and enhance and strengthen partnerships and improve levels of financing with UN organisations and civil society. GFDRR's 2014–2016 Work Plan (GFDRR, 2013d) states it will be working in close partnership with the World Bank's Social Development Resilience team to leverage Bank mechanisms that work directly at the community level, and with civil society, in order to build resilience of poor communities at the necessary scale. GFDRR will also issue two reports during 2014 on the World Bank's experience on Community Driven Development to support resilience, and a second on safety nets to support DRM (GFDRR Civil Society Partnership Strategy; Crisis and Post Crisis Multi-Donor Trust Funds: Fiduciary Principles Accord) (World Bank and UN, 2009). GFDRR's dialogue with key institutions of national governments could also lead to an enhanced role in improving country-level coordination and collaboration among the various development partners, including UNISDR and the UNDP Bureau for Crisis Prevention and Recovery (UNDP-BCPR). GFDRR also aims to strengthen its engagement with the private sector to better document and disseminate global knowledge and innovative approaches to DRM as well as develop technical partnerships (GFDRR, 2013h).

<sup>5</sup> Center on Conflict, Security and Development (CCSD): <http://go.worldbank.org/XMNH9CM70>

3. *Thematic* – An increasingly strategic focus is to providing more focused technical and financial support (notably in open DRI; safe schools and critical infrastructure; urban resilience; weather and climate services and early warning; and disaster risk financing). The 2014–2016 Work Plan points to a set of core thematic programmes that will support the implementation of the work plan (e.g. GFDRR Labs, hydromet, resilient cities, safer schools, Disaster Risk Financing and Insurance) (GFDRR, 2013h).

4. *Financial* – While the 2014–2016 Work Plan points to specific areas where GFDRR could expand financially, operationally the goal is to remain the small unit it currently is, whose main goal is to leverage larger-scale investments (GFDRR, 2013e). It is perhaps therefore on this leveraging power that any focus of expansion should concentrate (for larger World Bank credits or loans), which would involve elements of points 2 and 3 above. GFDRR is also seeking to develop a higher profile role as a trustee of pooled funds in support of a common goal to build resilience to disasters and climate change in order to respond to strategic opportunities or demands outside priority countries, particularly those with transformative or leveraging potential (e.g. priorities for safer schools, urban resilience mentioned earlier) (GFDRR, 2013e, 2013g, 2013h).

### Key pathway to expansion

Any increase in the percentage of emergency preparedness-related activities in non-priority countries would require it firstly being proposed by a GFDRR or CG member, and then approval by the CG, or the creation of further SDTF from interested donor countries. It is also clear that increased funds must be mobilised for the 2014–2016 work plan (GFDRR, 2013h). For this, dialogue and policy development with national governments (both donor and recipient) could further strengthen financial support and policy prioritisation for emergency preparedness. GFDRR's strategic role as trustee of pooled funds for emergency preparedness in the context of climate change (mainstream DRR and CCA into PRSs, CASs, UNDAFs, and NAPAs) is key. Additionally, GFDRR could also further capitalise on its positioning as the DRM focal point for the World Bank (i.e. representing the Bank in wider debates and bodies) to leverage the influence of the World Bank in forums such as the World Bank Group's Spring and Annual Meetings, the UN General Assembly, and the G20 to push the emergency preparedness/DRR agenda to the forefront of the development agenda. For example, the Bank's post-2015 delegation includes GFDRR, and GFDRR is responsible for preparing high-level World Bank (President's, Managing Directors' and Vice Presidents') talking points on DRM, while they also contribute to those on CCA.

GFDRR is collaborating with the broader UN system to implement the UN Plan of Action for DRR and Resilience. The close cooperation with UNISDR as the Secretariat of the ISDR System is at the core of the GFDRR partnership. The renewal of both the Hyogo Framework for Action and the Millennium Development Goals is an important opportunity to strengthen DRM as a development priority. GFDRR is working with the World Bank, the UN and other partners to promote the integration of disaster risk management into the Post-2015 framework. In addition, GFDRR is increasing cooperation with several other actors and agencies of the UN system. In this context, the continued revision of operational rules of World Bank to better enable the financing of non-governmental bodies is an important issue.

### Likely effect of expansion on case study countries

Currently, GFDRR does not provide financing to Myanmar or Sudan. While it provides financing to the Philippines (as a non-core country selected by donors), of the five case areas only Niger and Haiti are included in their priority countries (GFDRR, 2010). GFDRR has received increasing numbers of government requests for technical assistance outside of its priority countries, suggesting a geographical expansion approved by the CG would allow it to start providing financial or technical assistance to Sudan or Myanmar. In any case, funds would need to be mobilised to just fulfil the current 2014–2016 Work Plan.

In the context of Niger and Haiti, both projects have focused on enhancing technical capacity (including hazard identification, information platforms, training, and assessment capabilities). From an institution-building perspective, in Niger, the GFDRR is working closely with the Prime Minister's office to develop a legal, governance and operational framework for emergency preparedness, while in Haiti, the establishment of the National Crisis Council and its Technical Secretariat is a core part of Pillar 3. Both countries have benefited from a Government-led multi-stakeholder PDNA to better enable the development of a medium- and longer-term reconstruction and development framework to improve resilience to future hazards. In relation to the suggestions for expansion above, GFDRR could, in both territories, further engage in partnerships beyond the national and local government policy and technical bodies (perhaps drawing on lessons learnt from the establishment of the Global Earth Observation – Catastrophe Assessment Network in Haiti) to better incorporate community-based perceptions of key vulnerabilities. Greater preparedness financing for community-led projects, however, might detract funds from the significant requirements to enhance technical capacity for the identification, monitoring and preparation of key institutions for natural hazards.

## Summary: key messages for decision-makers

GFDRR has significant potential to continue to provide need-based and demand-driven technical assistance for mainstreaming DRR and climate adaptation policy development and implementation. Its key strengths are its ability to utilise its position within the World Bank and relationship with high levels of national governments to leverage larger scales of policy and structural investments in priority countries. It is further looking to strengthen its capacity to play a strategic role in the coordination of pooled funds for climate adaptation and coordination and collaboration with various different development partners (UN and NGOs). In its 7 years of operation, the GFDRR is already seen as a key multilateral organisation for the financing of emergency preparedness (covering most of the matrix, but with specific regards to DRR and climate adaptation) in vulnerable countries, where it is most needed. Its focus is on technical and institutional capacity in order to improve readiness for implementation, and in this way it successfully leverages larger amounts of financing for implementation.

Given that an expansion into conflict preparedness is unlikely, key areas for expansion would instead be a geographical expansion into enhanced capacity for natural hazard emergency preparedness in the context of conflict-affected and fragile states, and a continued strengthening of the level of international financing available for

emergency preparedness. Within the context of scarce financing for emergency preparedness, GFDRR is aiming to enhance its leveraging capability; becoming more of a fiduciary agent of climate finance; and enhancing its role in improving country-level coordination and collaboration among the various development partners, including UNISDR and UNDP-BCPR. Furthermore, GFDRR is also focused on improving its partnerships with and the financing of CSOs.

The reliance of GFDRR on government mandates for emergency preparedness/DRR financing is both a potential strength and challenge. GFDRR is reliant on scale of government demand for emergency preparedness, which at present is simply not enough. While it is aiming to expand the level of financing it disburses, funding in the next donor cycle remains a challenge. Therefore a key pathway to expanding both the reach and level of financing available for emergency preparedness would be increased advocacy at the national and international level for emergency preparedness to continue its move up the list of government priorities.

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# Financing of emergency preparedness – and the UNDP Crisis Prevention and Recovery Thematic Trust (CPR TTF)

Antony Vaux

## Introduction

The Thematic Trust Fund for Crisis Prevention and Recovery (CPR TTF) is supported by donors as well as being linked with pooled resources from UNDP. For a full description of the CPR TTF see the Annex below. The CPR TTF amounted to US\$158 million in 2011,<sup>1</sup> of which US\$43 million was from UNDP (under TRAC.1.1.3)<sup>2</sup> and the rest from donors. The largest donors in 2011 were Sweden, Norway, Japan and the UK. Out of the donor contribution, nearly 70% was earmarked for specific purposes or countries (see later).

The CPR TTF is managed by the Bureau for Crisis Prevention and Recovery (BCPR), which is a department of UNDP and was established

*'to support innovative approaches to crisis prevention, early warning and conflict resolution, as well as to help bridge the gap between emergency relief and long-term development... BCPR aims to make the best of UNDP's comparative advantage in "knowledge networking," quality technical assistance, convening and facilitation.'* (BCPR, 2012: 2–3)

BCPR has recently undergone a major reorganisation and has identified four key focus areas in which BCPR has a comparative advantage. The third relates directly to the CPR TTF: 'Rapid response to emerging unexpected crises, supported through an innovative UNDP trust fund mechanism for crisis prevention and recovery' (BCPR, 2012).

The core staff and activities of BCPR (and UNDP) are not funded by the CPR TTF but by the regular resources of UNDP. The CPR TTF acts as a mechanism by which donors can provide earmarked and un-earmarked funds for UNDP in relation to Crisis Prevention and Recovery – this includes the organisation's particular role as Cluster Lead in Early Recovery after disasters. Under 'Early Recovery',

UNDP aims to introduce development perspectives including Disaster Risk Reduction (DRR) at an early stage after a disaster. This function often leads UNDP into emergency preparedness but this is not always separated from wider processes of DRR and, reflecting UNDP's mandate, has a development rather than a humanitarian focus. In addition, the term 'Resilience' is increasingly used to define UNDP's objective in relation to disasters.

BCPR's basic purpose has a relationship to emergency preparedness, but the term is rarely used in higher-level descriptions. More typically,

*'BCPR seeks to reduce the human and economic costs of disasters by focusing on prevention. BCPR helps households, communities and institutions to enhance their resilience so they are better equipped to manage and reduce the effect of disasters in the future.'* (BCPR, 2012)

BCPR's focus, as its name indicates, is on 'crisis prevention and recovery' rather than emergency preparedness, which is not mandated to any one agency clearly. Because of UNDP's cyclical view of recovery leading to prevention, emergency preparedness may be included under terms such as 'Early Recovery' and 'early response'. In the aftermath of a disaster, UNDP may typically seek to strengthen national Disaster Risk Management (DRM) programmes, which may include elements of emergency preparedness, such as early warning, training or stockpiling. Nevertheless, emergency preparedness is sometimes referred to directly in project documents, and in some cases is specified as an objective at Outcome level (e.g. Belize, Namibia, Niger, Sierra Leone and Uganda).

BCPR has a remit within UNDP for addressing conflict issues and has developed expertise related to emergency preparedness for conflict, and inter-agency linkages relating to conflict and peacebuilding. The CPR TTF is available for both natural disasters and conflict. A general description of the CPR TTF from the BCPR Annual Report 2011 is attached as an Annex.

## Limitations of the study

This report draws mainly on the UNDP publication 'Thematic Trust Fund for Crisis Prevention and Recovery'

<sup>1</sup> 2011 is the latest year for which figures have been published. A review of figures for 2010 and 2009 indicates that the scale, donors and spread of categories remain stable, although the list of recipient countries reflects current emergencies. The draft report for 2012 is in preparation. The provisional total for the CPR TTF is US\$132 million.

<sup>2</sup> Strictly speaking, TRAC 1.1.3. is a separate Fund, but figures for expenditure are mostly aggregated. TRAC 1.1.3 is UNDP core funding set aside for BCPR.

dated August 2007, and the Annual Reports of BCPR, which include financial data relating to the CPR TTF. The latest of these is for 2011, as the 2012 report had not been finalised at the time of writing. These reports do not generally identify emergency preparedness and emergency preparedness for conflict as specific activities. In addition, they do not identify the funding source being used in a specific BCPR/UNDP activity. Therefore the activities and examples described in this report may not always have a direct linkage to the CPR TTF, but will be examples of the kind of activity that the CPR TTF could easily finance. The un-earmarked funds within the CPR TTF provide UNDP with a source of quick funding while other sources are mobilised. The CPR TTF probably would not be used if other sources (such as direct donor support) were available. A discussion with senior BCPR staff has helped to clarify these issues (Kamal Kishore, pers. comm.) but there is very little material on the CPR

TTF available online. This report also draws on thematic evaluations of UNDP's Contribution to Disaster Prevention and Recovery (2011) and of UNDP Assistance to Conflict-affected Countries (2006). No other evaluations or reviews were obtained during this short (3-day) review.

## General issues

### Categories of emergency preparedness supported by CPR TTF

Adjusting for terminology and the limitations touched on above, UNDP activity supported by the CPR TTF may be mapped out as follows in relation to the Categories Matrix being used in this study (from the ODI Inception Report). The most common types of activity, based on BCPR reports, are shaded.

**Table 1. Emergency preparedness matrix for the CPR TTF**

Categories of emergency preparedness		CPR TTF
Hazard and risk analysis and early warning	• Early warning systems (local, national, regional and international)	Vulnerable districts identified in Indonesia (see Box 1)
	• Hazard and Risk Analysis	Risk analysis in Armenia
Institutional and legislative frameworks	• Resource Allocation and Funding Mechanisms	Work across the UN to align resources with CPR needs
	• National Plan of Action, National Platform, National Disaster Management Authority	Support for national planning e.g. Indonesia
	• Regional agreements	n/a
	• International agreements	Work across UN to facilitate CPR
Resource allocation and funding	• National and regional risk pooling mechanisms	n/a
	• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency program budgets (internal)	Normally used for internal UNDP purposes only
Coordination	• Government Coordination mechanisms	Key area of UNDP focus
	• National and sub-national leadership structures	Significant activity <sup>(1)</sup>
	• Inter-Agency Coordination – national and sub-national	Mainly 'knowledge networking'
	• Cluster- and sector-established contextual standards	Supports UNDP as cluster lead for Early Recovery
Information management and communication	• Information Management systems – national, regional and international	Yes but informal
	• Communication systems	Informal
	• Cluster and sector information management systems – GIS, 3/4W's	As necessary in support of Cluster lead role
Contingency preparedness and response planning	• Community preparedness	Strong emphasis on resilience in UNDP but most activity may be at national level
	• Contingency Preparedness and Response Planning	Indonesia and Kenya (see Boxes 1 & 2)
Training and exercises	• Simulations, drills – with the presence of national and / or international actors	May take place as part of DRM but not a focus
	• Accredited training opportunities	n/a
	• Specific country context training opportunities	n/a
Emergency services and standby arrangements and pre-positioning	• Stockpiling – national, regional and international	n/a
	• Civil Protection, Emergency Services, Search and Rescue	This is often part of DRM activity but not a focus
	• Contingency partnership agreements – national, regional and international	n/a

Notes: n/a = information not available, but activity considered to be at a low level.

(1) 'Assessments of local state authorities and institutions at regional and district level were undertaken in Chad, South Sudan and Uzbekistan to help the governments of these countries to better evaluate their own capacity to deliver crisis recovery services.' (BCPR, 2012).

Emergency preparedness activities (corresponding to the categories used in this study by ODI) take place (if at all) under the wider headings of 'crisis prevention', 'recovery', 'DRM', etc. Emergency preparedness activities may be funded from the CPR TTF, but it is practically impossible to separate out emergency preparedness elements and link them directly to the Fund. It would, however, be a mistake to assume that, because the term 'emergency preparedness' is not being used, no such activity takes place.

### Key examples

The example of Indonesia (see Box 1) provides a typical example of UNDP activity (with BCPR playing a supporting role) in which the overall focus is on developing a DRR programme with the national government including extensive programmes at community level. Some of these activities could be regarded as emergency preparedness but they are not described as such in UNDP's account nor is the funding source specified for each activity.

In UNDP, emergency preparedness activity is within a wider context of efforts to increase long-term capacities and to prevent and mitigate disasters. UNDP often starts from 'Early Recovery' and then works to mitigate future disaster impacts by development means. This has often been described as 'disaster prevention' (a term almost unique to UNDP) but the term 'disaster risk reduction' (DRR) is now being used more widely. Although the term Resilience is increasingly used in UNDP, the focus is on the national level and on linking together institutions at national level. UNDP uses the term 'knowledge networking' (rather than 'coordination') for this activity.

Even in a clear case of emergency preparedness, namely preparedness for further violence around elections in Kenya following events in 2007 and 2008, UNDP's approach was focused on long-term solutions leading to prevention rather than short-term emergency preparedness. UNDP supported structures that were expected to play a role whenever violence happened. This was long-term capacity building, but could also be regarded as emergency preparedness (see Box 2).

#### Box 1. Preparing communities for disasters in Indonesia

The UNDP-supported Safer Communities for Disaster Risk Reduction programme has established disaster risk management agencies in all high-disaster risk areas. By November 2011, 90% of the identified high-risk districts (33 provinces, including 357 districts and municipalities) had operational agencies. Furthermore, UNDP has been closely engaged with the National Disaster Management Agency in integrating disaster risk reduction into the national five-year development plan, which will mean that future activities will be paid for through the state budget.

Indonesia became one of the first countries in the region to develop comprehensive guidelines and tools for assessing damage, loss and needs for post-disaster recovery. Today it is recognised as having some of the best policy and institutional capacity for large scale disaster recovery in South-East Asia.

The result of this investment in preparedness and recovery was demonstrated when a powerful 7.6 magnitude earthquake hit Aceh province in the northern tip of Indonesia on 10 January 2012 with no damage or casualties.

UNDP-supported institutional and community response systems worked efficiently, tsunami warnings were issued by the Aceh Government on time, appropriate evacuations were made and no lives were lost.

Source: BCPR (2012).

#### Box 2. Preparing for violence relating to elections in Kenya

After the violence in 2007 and 2008, UNDP supported government efforts to expand the formal peace mediation. UNDP has helped fund, establish and train 120 District Peace Committees in conflict reconciliation techniques. Over 200 potentially violent conflicts have now been averted across the country through the 15–25 person committees that identify potential violent hotspots and defuse them through negotiation, dialogue, and traditional reconciliation approaches.

To better manage inter-communal conflict, UNDP helped the government to train more than 1,000 administrative and police officers, in partnership with the Kenya Institute of Administration. The training helps officers identify where violence may occur and pro-actively prevent it. This has resulted in increased community confidence and partnership with the police, which was amply demonstrated during the national referendum for a new constitution in August 2010, when many communities worked closely with the police to prevent threatened violence.

In order to better understand some of the underlying causes behind the 2008 violence, UNDP has supported the government to conduct a conflict analysis survey, which informed the development of a national strategy on militias and armed groups.

Source: BCPR (2012).

## Spread of activities across categories

As noted earlier, CPR TTF reporting does not identify emergency preparedness as a separate category, but instead uses ‘windows’.

The CPR TTF provides a breakdown of the expenditure by ‘window’ for each country, but there is no further disaggregation (to identify a specific emergency preparedness activity). The examples and texts of BCPR Annual Reports provide further detail and show that UNDP carries out activity corresponding to the emergency preparedness categories set out in Table 2, but as noted, the terminology is often different.

UNDP has an increasing involvement with the security sector, and BCPR (with its remit for conflict) plays a role linking the aid apparatus with the peacebuilding apparatus. BCPR’s Global Rule of Law Programme (*inter alia*): *‘improves human security by working with governing institutions and communities affected by insecurity and injustice and increases access to justice for all by ensuring that the law is not discriminatory, holds to international and regional standards and norms, and is accessible to all.’*

Although the intention relates to security, such activities include elements of emergency preparedness (or emergency preparedness for conflict).

The CPR TTF is not the normal source of funding for the security-related activities of UNDP (although it can be used for conflict as well as for natural disasters). This is because other funding is often available. UNDP often receives direct donor support for such activity and has been the main implementer of security-related projects conducted under the UN Peacebuilding Fund (PBF), which amounted to US\$80 million in 2012, with a target of US\$100 million for 2013. BCPR supports and monitors

the overall UNDP implementation of the PBF’s projects to improve the way they perform. It provides technical assistance for project design and follows how the projects are implemented in order to identify and address projects with potential issues. This also includes aid-tracking systems in peacebuilding countries to tally how donor money is spent. BCPR also plays a role in planning how money from the PBF is spent in specific countries (Chad, Guinea and Liberia in 2011). Internally, in 2011, BCPR conducted a review of UNDP’s contribution to peacebuilding. The availability of PBF and other funds for situations of violence and conflict (emergency preparedness for conflict) may mean that UNDP uses the CPR TTF mainly for ‘natural’ disasters (emergency preparedness).

## Geographical spread

The CPR TTF is a global fund with no restriction beyond UNDP’s own focus and mandate. The top 15 countries by expenditure in 2011 were (in decreasing order of magnitude) Palestinian Territories, Haiti, Democratic Republic of Congo, Somalia, Pakistan, Liberia, Sri Lanka, Nepal, Chad, Sudan, Niger, Timor Leste, Yemen, Côte D’Ivoire and Lebanon. The CPR TTF covers a very wide range of countries: the 2011 Report states that UNDP has helped 59 governments to establish comprehensive DRR programmes. Activity may continue over long periods (>5 years) but may be supported by different funding sources during that time. The CPR TTF may typically help in the early stages after a disaster, but then UNDP may seek to attract longer-term funding from donors. The list of top countries changes more rapidly to reflect current emergencies (Haiti was the biggest recipient in 2009 and 2010).

## Assessment

### Focus and strengths of the Fund

No evaluations or reviews of the CPR TTF have been made available. It is clear that the focus of the Fund (insofar as it focuses on emergency preparedness at all) is on the developmental side of emergency preparedness in terms of activities, but is often stimulated through the need to recover, often through Early Recovery. From the time a disaster occurs, UNDP is seeking to support resilient communities, institutions and nations:

*‘After disasters, UNDP works with countries to help them reform or improve official systems for disaster risk management – the body of policies, strategies, plans, legislation and institutional mechanisms that reduce the risk of disaster and govern recovery interventions aimed at “building back better.”* (BCPR, 2012: 22)

Emergency preparedness is, however, a relatively small element in this wider vision. UNDP’s experience suggests

**Table 2. Expenditure by window of the CPR TTF 2011**

CPR TTF window	Expenditure (US\$)
Conflict Prevention and Recovery	63,788,105
Disaster Risk Reduction and Recovery	13,395,168
Early Recovery	21,699,187
Gender Equality	5,479,591
Policy and Programme Support	7,008,309
<b>GRAND TOTAL</b>	<b>111,370,359</b>

Notes: Excluding TRAC 1.1.3 funds.

that national governments often focus on emergency preparedness (emergency services, stockpiling, etc.) (K Kishore, pers. comm., Aug. 2013) and so UNDP's role is to draw attention to more structural forms of change, such as setting in place the legislative frameworks for disaster response, etc. In some cases, UNDP reaches further, seeking to ensure that development policies take better account of disasters. Elements of emergency preparedness may be included in these wider processes. For these reasons, UNDP (without claiming that emergency preparedness is always addressed) has not given emergency preparedness a prominent place in its work.

In conclusion, the main strength of the CPR TTF is its flexible and timely support for UNDP's developmental approach to disasters. As stated in the 2007 description (BCPR, 2012):

*'This fast, flexible funding mechanism allows UNDP to respond effectively to crisis prevention and recovery needs. The CPR TTF is designed for quick action following a natural disaster or violent conflict, or when a unique opportunity arises to reduce disaster risk or prevent conflict.'*

Its weakness from a UNDP perspective may be the high proportion of earmarked funds (this is analysed in the TTF annual reports). From an emergency preparedness perspective, a weakness is that it is not specifically identified and therefore emergency preparedness activity is not clearly tracked: gaps are not identified and it is difficult to assess UNDP's contribution to emergency preparedness, as opposed to 'disaster prevention and recovery', which was the subject of an evaluation in 2011. The functions of the CPR TTF within this wider picture are even more difficult to track in relation to emergency preparedness because it is not recognised as a distinct activity.

## Potential expansion

BCPR identifies lack of funding as a general constraint, especially on its long-term work relating to disasters:

*'Difficulties in raising adequate funding, both by UNDP and national and local partners, have often stymied the process of improving the capacity of governments to prevent and mitigate the effects of disaster.'*  
(BCPR, 2012)

But this problem is not specific to emergency preparedness and, as noted above, UNDP finds that national governments may be more willing to address emergency preparedness (or at least some elements of it) rather than DRR. Nevertheless, BCPR has indicated that it would be willing to respond to a more explicit focus on emergency preparedness by donors, or even open a 'window' for monitoring and accounting purposes, but would want this to happen as part of a wider 'package' of inputs.

In relation to conflict, BCPR's Annual Report notes that funding is more readily available for short-term crises (e.g. impending elections) rather than longer-term chronic situations of instability. BCPR observes that the opportunities for moving from short-term interventions towards systematic support for conflict prevention are often missed. In principle there could be an increase in activity such as support for institutions that (when violence occurs) might reduce tensions and this might be regarded as a form of emergency preparedness (or rather emergency preparedness for conflict).

In 2011, BCPR published the study *'Disaster Conflict Interface: Comparative Experiences'* drawing attention to the close relationship between natural disasters and conflict and the danger that conflict is ignored both as a type of disaster and as a key factor relating to natural disasters. This points towards the need for greater conflict sensitivity or 'conflict inclusivity' in relation to both DRR and emergency preparedness. Arguably this could be a role for BCPR in relation to UNDP, national governments and even other Inter-Agency Standing Committee (IASC) members. It might, for example, perform a 'conflict sensitivity audit' of DRR programmes (backed by the CPR TTF perhaps). A section of the BCPR Annual Report could be used to give the issue prominence.

BCPR is also in a good position to influence the PBF towards better recognition (and thereby funding) of emergency preparedness. This could be done directly with security forces and also in programmes with civil society. For example, it appears from the Niger Case Study (undertaken by ODI as part of its investigation into emergency preparedness financing) that risks from conflict and natural disaster risks have been poorly integrated. The effectiveness and efficiency of aid operations might have been improved by making these links. Provision could be made for BCPR to draw on both PBF and CPR TTF in such cases to make studies of the conflict linkage and promote 'knowledge networking'.

However, the expansion of the CPR TTF is limited because, at least in practice, it is a mechanism specifically for UNDP. It exists 'to enhance UNDP programme activities' according to mandate given by UNDP's Administrator. Technically the CPR TTF is open to a wide range of actors (UN agencies, NGOs, even the private sector); however, traditionally, the vast majority of its grants have been made to UNDP country offices, for them to implement. In just a few cases of joint operations or programmes the Fund might be shared with a partner organisation, but this is not its focus or intention (K. Kishore, pers. comm., Aug. 2013). In theory the UNDP Administrator could change this, but donors might need to be persuaded to increase funding rather than simply extend the mandate of the Fund.

## Conclusions

### Summary

The CPR TTF is essentially a financing mechanism for UNDP. Its influence derives from both a set of UNDP priority countries and the funding choices and earmarkings of donors. It is not much used by other actors, but it could be, with appropriate strengthening of policy. The most important question is whether UNDP plays a sufficient role in relation to emergency preparedness and, if not, whether the CPR TTF financing mechanism could be used to address this issue.

The danger in the current UNDP approach is that attention is focused on the positive scenario of being able to reduce disaster risk and 'prevent' disaster, and this might lead to neglect of the negative scenario in which preparedness is necessary. There is also a case for expansion of emergency preparedness activity by UNDP in cases where national governments do not take a lead and in relation to conflict and conflict sensitivity. UNDP could choose to make these activities a priority and then make use of the CPR TTF for financing. The Fund does not lead UNDP: it is the other way round. But if donors were sufficiently concerned they could earmark funding under the CPR TTF and BCPR would consider opening a 'window' to give better recognition for emergency preparedness, so long as the purpose and approach fell within UNDP's general remit. If donors increased the level of funding in order to include other organisations, UNDP would probably agree, provided that it was involved in the same activity and the general purpose was within the UNDP mandate and priorities.

A problem with giving greater attention to emergency preparedness is that it could divert attention from UNDP's fundamental role as a development rather than a humanitarian organisation – and its focus on risk reduction rather than preparedness. A stronger case could probably be made for a role influencing DRR actors to take better account of conflict. This could be a useful counter to current tendencies and lead to more integrated long-term engagements. The World Bank's World Development Report 2011 strongly supports a holistic approach to conflict and development and this appears to be widely accepted among donors. With its mandate for both conflict and natural disasters (and recent attention to the conflict-disaster interface), UNDP would be particularly well placed to take a lead. This does not present any problem in relation to the CPR TTF, which is available for all types of crisis. UNDP could also influence funds associated with conflict prevention and peacebuilding (such as the UN PBF) to focus more sharply on preparedness issues. This could become a special responsibility of BCPR within UNDP.

### Implications for the ODI synthesis report

The impetus of the Hyogo Framework for Action has focused international attention on DRR. UNDP has in part responded to this agenda by introducing DRR at an early stage after a disaster using the term 'Early Recovery', which is now recognised as a humanitarian Cluster. The draft report seeks to put emergency preparedness at the 'front end' of the disaster response cycle and to separate it out more clearly from DRR. The danger is that this approach may lead back to the 'phased' and limited approach to disasters that the current focus on DRR has challenged.

The advantage of the DRR approach is that it goes beyond emergency preparedness to draw attention to developmental issues that increase disaster risks. It moves towards institutional issues and away from short-term preparedness. To some extent, the Report's definition of emergency preparedness embraces the DRR agenda, but by doing so introduces confusion between prevention, risk reduction and preparedness.

A more practical factor is that substantial funding streams are now linked to DRR and have been boosted by funds related to climate change. Agencies have adjusted their terminology to maximize access to DRR and climate change funds, and in this process emergency preparedness has been subsumed into DRR. This does not necessarily mean that emergency preparedness has disappeared: it is just less prominent in the terminology. The apparent neglect of emergency preparedness may be an illusion. But there is also a risk that some categories of necessary preparedness may be overlooked.

The hypothesis that national governments generally take the lead on emergency preparedness and neglect DRR is worth investigating further. Much will depend on the resources and capacity of different governments: it may be that emergency preparedness does need strong emphasis in some countries, but DRR may also be neglected in the same situations.

Because DRR has been framed around natural disasters there is a much stronger case for giving greater attention to conflict but this problem is not limited to emergency preparedness. It needs to be addressed across the wider DRR spectrum. Rather than separate out emergency preparedness (creating a new emergency preparedness for conflict category) it may be better to promote conflict sensitivity across DRR, including preparedness. This implies a need to review all the funding mechanisms (especially those relating to DRR) in relation to conflict sensitivity. There is also a need to link conflict prevention and peacebuilding agencies into DRR and emergency preparedness.

This analysis is significantly different from that in the draft report, and if accepted would imply far-reaching adjustments.

## References

**BCPR [Bureau for Crisis Prevention and Recovery].** 2012. *Annual Report 2011*. Available at: [http://www.undp.org/content/dam/undp/library/crisis%20prevention/BCPRAR2011\\_final.pdf](http://www.undp.org/content/dam/undp/library/crisis%20prevention/BCPRAR2011_final.pdf) Accessed 2014-03-17.

**UNDP. 2007** *Thematic Trust Fund for Crisis Prevention and Recovery*, p.11. UNDP, New York.

## Annex

### Description of the CPR TTF (BCPR, 2012)

In 1996, UNDP committed to funding crisis prevention and recovery activities by setting aside 6.6 percent of its total core resources and establishing TRAC 1.1.3. (Target for Resources Assignment from the Core 1.1.3) mechanism. This enables more rapid and flexible deployment of funds to UNDP Country Offices in need. The percentage of money taken from core resources and used in TRAC 1.1.3 was increased to 7.2% in 2002.

The Emergency Response Division was created in 1996 to manage these resources and to provide technical advice to Country Offices in crisis and post-conflict situations. The division became BCPR in November 2001. With the establishment of BCPR, crisis prevention and recovery was designated as one of UNDP's main thematic practices. To support these roles and to better respond to urgent country needs, UNDP established the Thematic Trust Fund for Crisis Prevention and Recovery (CPR TTF), managed by BCPR on behalf of UNDP.

Since its inception, the Trust Fund has mobilised more than US\$ 1.2 billion to support crisis prevention and recovery initiatives and kick-started hundreds of innovative projects with UNDP Country Offices, providing support to crisis-affected countries around the world.

The Trust Fund is fast and flexible, allowing UNDP to respond quickly to crisis prevention and recovery needs as they arise. It also allows for quick disbursement following a natural disaster or violent conflict, or when a unique opportunity arises to reduce disaster risk or prevent conflict. Money from the Trust Fund is used for relatively short-term interventions. It has a number of important features that render it different from similar global funds in the area of crisis prevention and recovery.

The Trust Fund:

- is aligned with UNDP's Strategic Plan;
- can rapidly receive and allocate funds to UNDP Country Offices for immediate response to crises (it can receive contributions more speedily than any other mechanisms in UNDP);
- has the flexibility to re-focus funding in response to evolving crisis prevention and recovery needs;
- is backed by the guarantee of BCPR's high-quality, integrated technical expertise and programmatic support towards the delivery of money – often with

the support of UNDP rapid deployment response mechanism; and

- provides transparent annual reporting, including financial details, a review of historical trends, and a results-based narrative description of UNDP's crisis prevention and recovery accomplishments, lessons learned and challenges.

Donors may contribute un-earmarked resources, which allow for the greatest flexibility to respond quickly to crises by delivering technical expertise, lessons learned, and programme and project funding support in a coherent and effective manner. In addition, contributions can be made for specific thematic areas, countries, or any combination thereof.

### Method of allocating funds from the CPR TTF (UNDP, 2007)

All projects requesting funding from CPR TTF resources that are un-earmarked or earmarked for specific thematic areas are submitted to the BCPR Project Appraisal Committee (BPAC). The Committee consists of the Chiefs of BCPR's Conflict Prevention and Recovery Team, Disaster Reduction and Recovery Team, the Early Recovery and Cross-Cutting Issues Team, the Central Strategy and Policy Cluster, the Programme and Operations Support Cluster, and the Senior Advisor for External Relations. Chaired by the Deputy Directors of BCPR, the Committee meets monthly (or on an *ad hoc* basis in case of specific emergency situations) to review the merits of each project based on the following criteria:

- alignment with the funding criteria of the Fund, the Bureau Strategy, and the crisis prevention and recovery priorities of the region and country where the project will take place;
- technical soundness of the project design, including gender equality, monitoring and evaluation, and knowledge management components;
- implementation capacity of the sponsoring Country Office (based on a track record of successful delivery of crisis prevention and recovery projects); and
- an appropriate and reasonable budget that reflects a diversity of funding sources, including commitments from other partners and from the UNDP Country Office.

Once a project has the endorsement of the Committee, the BCPR Director approves the project for funding.

# Financing of emergency preparedness and the Adaptation Fund

*Nella Canales Trujillo and Smita Nakhooda*

## Introduction

The Adaptation Fund was established with the overall objective of 'reducing vulnerability and increasing adaptive capacity to respond to the impacts of climate change, including variability at the local and national levels' (Adaptation Fund Board, 2010). This is done through financing the total costs (as opposed to only incremental or additional adaptation costs) of climate change adaptation projects and programmes. A concrete adaptation project is defined as a set of activities aimed at addressing the adverse impacts of and risks posed by climate change. The activities shall aim at producing visible and tangible results on the ground by reducing vulnerability and increasing the adaptive capacity of human and natural systems to respond to the impacts of climate change, including climate variability (Adaptation Fund Board, 2010). From the indicative set of four activities suggested for support by the Adaptation Fund since its establishment decision in 2001 (UNFCCC, 2001, Decision 5/CP.7.), three are aligned with emergency preparedness activities supporting: hazard and risk analysis and early warning particularly around vector diseases affected by climate change; institutional and legislative frameworks for integrating climate risks, particularly to extreme weather events; information and management communication for information networks at national and regional level; and contingency preparedness planning, for extreme weather events. The fourth activity is generic, 'Starting to implement adaptation activities promptly where sufficient information is available to warrant such activities, *inter alia* in the areas of water resources management, land management, agriculture, health, infrastructure development, fragile ecosystems, including mountainous ecosystems, and integrated coastal zone management.' This preliminary list of 'fundable' adaptation activities was established under the Marrakesh Accords in 2001, as a guide for those adaptation projects that could be approved under any of the UNFCCC mechanisms. The list shows that the relationship between resilience and preparedness was established immediately in the early stages of the adaptation finance debate (see Table 1).

One of the main innovations by the Adaptation Fund has been the approval of a Strategic Results Framework before projects began to be approved. The framework is organised around seven expected outcomes and their

respective indicators. All proposed projects need to indicate which of the outcomes, outputs and indicators they will contribute to. Information on the accomplishment of such contribution is collected annually through a Results Tracker Tool, part of the Project and Programme Performance Report (Adaptation Fund Board, 2011). Three of the outcomes can be associated with emergency preparedness activities: Outcome 1 – Reduced exposure at national level to climate-related hazards and threats; Outcome 2 – Strengthened institutional capacity to reduce risks associated with climate-induced socio-economic and environmental losses; and Outcome 3 – Strengthened awareness and ownership of adaptation and climate risk reduction process at local level. There are some indicators that could be considered as a perfect match for emergency preparedness activities, such as Indicator 1.2, on the development of early warning systems, or Indicator 2.1.1, on number of staff trained to respond to (and mitigate) climate extreme events. However, there are others, like those related to Outcome 3 – strengthening awareness, that could support emergency preparedness planning at local level, although this focus is not explicit (see Table 1).

## Allocation and distribution

All the countries signatories to the Kyoto Protocol (149<sup>1</sup>) are eligible to access the Adaptation Fund, so geographically there is no specific allocation and access is determined through a first-come first-served mechanism. The Adaptation Fund does not provide a specific allocation to support emergency preparedness activities, but all supported activities need to demonstrate a connection with climate change or variability, and comply with the Adaptation Fund's review criteria. This is more related to consistency with existing policies and legislation on climate change at national and local level, as well as concerning the sustainability of the project itself, rather than to a specific list of eligible activities.

<sup>1</sup> Including 37 Fragile States: Angola, Bangladesh, Burundi, Cameroon, Central African Republic, Chad, Comoros, Côte d'Ivoire, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Georgia, Guinea, Guinea-Bissau, Haiti, Iran (Islamic Republic of), Iraq, Kiribati, Liberia, Malawi, Marshall Islands, Micronesia (Federated States of), Myanmar, Nepal, Niger, Nigeria, Pakistan, Rwanda, Sierra Leone, Solomon Islands, Somalia, Sri Lanka, Timor-Leste, Togo and Uganda.

**Table 1. Emergency preparedness activities to be supported by the Adaptation Fund, and relationship with the Adaptation Fund Strategic Results Framework**

Preparedness matrix: categories of emergency preparedness	Eligible activities to be supported through the Adaptation Fund <sup>(1)</sup> and elements from the Adaptation Fund Strategic Results Framework
Hazard and risk analysis and early warning <ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard and risk analysis</li> </ul>	Improving the monitoring of diseases and vectors affected by climate change, and related forecasting and early warning systems, and in this context improving disease control and prevention. Outcome 1: Reduced exposure at national level to climate-related hazards and threats. Output 1: Risk and vulnerability assessments conducted and updated at national level. Indicator 1.1 Number and type of projects that conduct and update risk and vulnerability assessments. Indicator 1.2 Development of early warning systems.
Institutional and legislative frameworks <ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>	Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme weather events. Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socio-economic and environmental losses. Output 2.1 Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events. Indicator 2.1.1 Number of staff trained to respond to and mitigate impacts of climate-related events from targeted institutions increased. Indicator 2.1.2 Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased.
Resource allocation and funding <ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>	Not specifically addressed.
Coordination <ul style="list-style-type: none"> <li>• Government coordination mechanisms<sup>(2)</sup></li> <li>• National and sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster- and sector-established contextual standards</li> </ul>	Not specifically addressed.
Information management and communication <ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster and sector information management systems – GIS, 3/4W's</li> </ul>	Strengthening existing and, where needed, establishing national and regional centres and information networks for rapid response to extreme weather events, utilising information technology as much as possible. Outcome 2: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses. Output 2.1 Strengthened capacity of national and regional centres and networks to respond rapidly to extreme weather events. Indicator 2.1.2 Capacity of staff to respond to, and mitigate, impacts of climate-related events from targeted institutions increased.

Preparedness matrix: categories of emergency preparedness		Eligible activities to be supported through the Adaptation Fund <sup>(1)</sup> and elements from the Adaptation Fund Strategic Results Framework
Contingency preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness<sup>(2)</sup></li> <li>• Contingency preparedness and response planning</li> </ul>	<p>Supporting capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change, including contingency planning, in particular, for droughts and floods in areas prone to extreme weather events.</p> <p>Outcome 3: Strengthened awareness and ownership of adaptation and climate risk reduction process at local level.</p> <p>Output 3: Targeted population groups participating in adaptation and risk reduction awareness activities.</p> <p>Indicator 3.1.1 Number and type of risk reduction actions or strategies introduced at local level.</p>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national or international actors, or both</li> <li>• Accredited training opportunities</li> <li>• Specific country-context training opportunities</li> </ul>	Indicator 2.1.1 Number of staff trained to respond to and mitigate impacts of climate-related events from targeted institutions increased.
Emergency services and standby arrangements and pre-positioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services<sup>(3)</sup>, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>	Not specifically addressed.

Notes: (1) Decision 5/CP7 indicates the same set of activities to be 'shall be' supported through the Special Climate Fund, the Adaptation Fund and other bilateral and multilateral funds (See page 4 of the decision).

(2) These areas of activity imply understanding in detail the relationship between national and local government finances. This study was not able to go onto detail on this matter.

(3) 'Services' here goes beyond fire engines and ambulances, to cover being prepared to provide many other services, such as mobile health teams to cover displaced populations, emergency water supply, or psycho-social support.

Sources: UNFCCC (2001); Adaptation Fund Strategic Results Framework (Adaptation Fund Board, n.d.).

## Emergency preparedness activities currently supported by the Adaptation Fund

From a preliminary review<sup>2</sup> of the 28 projects approved by the Adaptation Fund as of August 2013, 17 (61%) included at least one emergency preparedness activity in the operationalisation of their climate change adaptation objectives. The total approved budget for projects was around US\$184 million, of which those projects with emergency preparedness activities represented US\$113 million<sup>3</sup>. From this group, 16 received financial support for the establishment of early warning systems, mainly for climate-related hazards, such as floods (including coastal, inland and glacial types) and droughts. Seven of the projects also included the improvement of their hydro-meteorological networks, both at national and sub-national levels, and in all cases

linked to the establishment or expansion of early warning systems. Four of the projects also included preparedness planning activities at the community level, mainly for the identification and participatory monitoring of hazards at local level. Two projects included a pilot programme on climate-indexed insurance for agriculture. In one case, the Fund supported the establishment of a new institutional framework for Glacial Lake Outburst Flood (GLOF) with a multi-stakeholder steering committee in northern Pakistan.

## Examples of good practice in funding emergency preparedness

Considering that climate change adaptation includes the identification of climate-related hazards, the establishment of early warning systems for climate-related extreme events seemed the activity which more easily related to emergency preparedness. Having a system to identify the occurrence of extreme weather events – if acted upon – not only minimises the loss of lives and livelihoods, but strengthens local capacity to monitor climate variables, enabling increased resilience and rapid recovery.

<sup>2</sup> The review considered information in the project, title and objectives on main outcomes and activities. A detailed review of underlying project documentation was not completed.

<sup>3</sup> This figure reflects the 100% allocated to the projects with emergency preparedness activities (17 projects). The figure does not represent the amount for specific emergency preparedness activities.

**Table 2. Countries with emergency preparedness activities supported by the Adaptation Fund**

Preparedness matrix: categories of emergency preparedness	Countries where the Adaptation Fund financially supports emergency preparedness activities
Hazard and risk analysis and early warning <ul style="list-style-type: none"> <li>• Early warning systems (EWS) (local, national, regional and international)</li> <li>• Hazard and risk analysis</li> </ul>	Argentina (EWS), Colombia (EWS and risk analysis), Cook Islands (EWS), Ecuador (EWS), Eritrea (EWS), Georgia (EWS), Honduras (risk analysis), Lebanon (EWS), Madagascar (EWS), Mauritius (EWS), Pakistan (EWS), Papua New Guinea (EWS), Sri Lanka (EWS), Tanzania (risk analysis) and Uruguay (EWS)
Institutional and legislative frameworks <ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, Resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>	Pakistan (GLOF multi-stakeholder Steering Committee)
Resource allocation and funding <ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>	Argentina, Lebanon (climate indexed-based insurance)
Coordination <ul style="list-style-type: none"> <li>• Government coordination mechanisms <sup>(1)</sup></li> <li>• National and sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster- and sector-established contextual standards</li> </ul>	Not found in the countries receiving financial support.
Information management and communication <ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster and sector information management systems – GIS, 3/4W's</li> </ul>	Argentina, Colombia, Cook Islands, Eritrea, Madagascar, Tanzania and Uruguay.
Contingency preparedness and response planning <ul style="list-style-type: none"> <li>• Community preparedness <sup>(1)</sup></li> <li>• Contingency Preparedness and Response Planning</li> </ul>	Argentina, Pakistan, Papua New Guinea, Samoa.
Training and exercises <ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and / or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>	Not found in the countries receiving financial support.
Emergency services and standby arrangements and pre-positioning <ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services <sup>(2)</sup>, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>	Not found in the countries receiving financial support.

Notes: (1) These areas of activity imply understanding in detail the relationship between national and local government finances. This study was not able to go in detail into this relationship.

(2) 'Services' here goes beyond fire engines and ambulances, to cover being prepared to provide many other services, such as mobile health teams to cover displaced populations, emergency water supply, or psycho-social support.

Source: Adaptation Fund Portfolio analysis

## Adaptation Fund support for emergency preparedness

### Support by type of risk

The Adaptation Fund has been operational since late 2009, with implementation effective only since 2011. There is not enough evidence to conduct an assessment of the effectiveness of the emergency preparedness support by the Fund. However, from preliminary evidence available, the support for emergency preparedness activities is, appropriately, focused on climate hazards, such as floods or droughts, with no evidence so far of including conflict-related preparedness.<sup>4</sup> Table 3 shows insights on the implementation status of the emergency preparedness activities identified in each project, based on the available Project Performance Reports (PPRs) for 4 of the 28 approved projects.

Early insights from Adaptation Fund project implementation suggest that some emergency preparedness activities, such as the establishment of early warning systems, need stronger ownership at local level (Adaptation Fund NGO Network, 2013). The need to ensure the sustainability of early warning systems after the project formally ends has also been highlighted (Adaptation Fund NGO Network, 2013), as early warning systems will need constant information flows to work effectively (which requires funding). Nevertheless, Adaptation Fund-supported projects have often supported emergency preparedness activities as part of a wider climate change adaptation strategy.

### Potential for expansion

There is scope for the Adaptation Fund to provide further support for emergency preparedness activities, particularly associated with coordination or establishment of emergency preparedness coordination units at national and sub-national levels, as well as emergency preparedness plans. The Adaptation Fund guidelines allow for it to support other activities linked to emergency preparedness, such as institutional and legislative frameworks, information management and communication, and contingency preparedness and response planning. To date, however, there has been relatively less emphasis on these projects. Given that the Adaptation Fund recognises the importance of engaging local-level institutions and localised dimensions of adaptation, and the localised

nature of emergency preparedness contingency planning, this is potentially an area where more can be done.

Early warning systems are a specific element of the Adaptation Fund Strategic Results Framework, and consequently are prominent in the projects supported

**Table 3. Implementation status of emergency preparedness activities supported by the Adaptation Fund**

Country	Project title	Implementation Status
Honduras	Addressing Climate Change Risks on Water Resources in Honduras: Increased Systemic Resilience and Reduced Vulnerability of the Urban Poor	<ul style="list-style-type: none"> <li>• Preparatory studies and formal agreements for the acquisition of 60 new meteorological stations for the network. New stations will be interlinked with the early warning systems.</li> <li>• Sites for the establishment of the 4 early warning systems for flood and landslide have been identified. Technical details still under analysis.</li> </ul>
Nicaragua	Reduction of Risks and Vulnerability Based on Flooding and Droughts in the Estero Real River Watershed	<ul style="list-style-type: none"> <li>• 8 electronic information posts installed in each micro-watershed to provide geo-referenced climate data.</li> </ul>
Senegal	Adaptation to coastal erosion in vulnerable areas	<ul style="list-style-type: none"> <li>• No specific preparedness activities identified.</li> </ul>
Solomon Islands	Enhancing Resilience of Communities in Solomon Islands to the Adverse Effects of Climate Change on Agriculture and Food Security – Strogem Waka lo Community fo Kaikai (SWoCK)	<ul style="list-style-type: none"> <li>• No advancement in implementation in emergency preparedness activities. However, the project includes the development of 3 early warning systems (for rain and cyclones) tailored for agricultural users, accompanied by information strategies with government and NGO personnel.</li> <li>• The project maintains good relationship with its counterparts, including the Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) and the Ministry of Agriculture and Livestock (MAL).</li> </ul>

Source: Annual Performance Report (Adaptation Fund Board, 2012).

<sup>4</sup> No evidence or details were found on fragile or conflict states in the Fund's operational guidance instruments. The following fragile states are currently receiving financial support from the Adaptation Fund: Eritrea, Georgia, Pakistan, Solomon Islands and Sri Lanka. A quick review (looking for fragile and conflict words in the project documents) to such proposals, reveals that there is no evidence of any particular measure or mention of the fragility or condition of conflict as a state.

by the Adaptation Fund. It is highly unlikely that the Framework would be revised to focus on a wider suite of emergency preparedness activities. It may, however, be possible to have guidance that allows related activities to be better integrated with wider emergency preparedness activities (for example by ensuring that early warning systems projects are embedded in wider emergency preparedness plans).

It is worth noting that many Adaptation Fund supported projects have focused on 'hard investments' that will prevent climate-related disasters (such as sea wall reinforcement in prevention of sea level rise due to climate change) rather than on strengthening preparation for emergencies. While emergency preparation and emergency prevention can be complementary objectives for programmes, they have not always been pursued in an integrated fashion. Resource availability limitations may also mean that countries have to choose which of these two approaches on which to focus, based on the fact that the funding for projects under the Adaptation Fund is limited to a US\$10 million cap.

### Challenges for expansion

The amount of funding that Adaptation Fund can give individual countries is capped at a relatively low level of US\$10 million (compared with the Pilot Program for Climate Resilience (PPCR) cap of US\$30 to 60 million per country). The expansion into preparedness actions implies quite significant costs, which may exceed available resources. In addition, the Adaptation Fund is at present one of the smallest climate funds, and resource availability is significantly constrained, with only US\$166 million in donor voluntary contributions since 2009 (representing an average of US\$41.5 million per year, compared with the more than US\$100 billion per year required, although the range of adaptation costs goes even beyond US\$100 billion per year and it is highly likely that this number is under-estimating the true cost of adaptation (Parry *et al.*, 2009)). It is believed that further support for emergency preparedness activities is unlikely to be very high on the Adaptation Fund Board's list of near-term priorities, particularly given that the Fund is currently focused on mobilising additional resources and resolving its future implementation arrangements, including how it will relate to the Green Climate Fund.

### Strengthening Adaptation Fund support for emergency preparedness activities

The expansion of support for emergency preparedness activities through the Adaptation Fund could involve the following aspects:

1. Encourage more systematic analysis of the scope and impact of emergency preparedness-related activities

that the Fund has supported to date, with a view to helping to strengthen their impact and effectiveness. Guidance to this effect could be developed through the Fund's Operational Guidelines, in the context of the Overall Comprehensive Evaluation of the Adaptation Fund due to be underway in late October 2013 (Adaptation Fund Board, 2013).

2. Include recommendations in operational guidelines, such as the guidelines to comply with:
  - 2a. Project Review Eligibility criteria. This could include specific emergency preparedness questions such as: Does the project include coordination with emergency-related institutions and planning units at the corresponding levels?
  - 2b. Guidelines for the Results Framework. This could include qualitative questions around key indicators and outcomes where sustainability is related to their implementation alongside emergency preparedness activities (See Table 1).
  - 2c. Guidelines for complying with the annual reporting formats. Include examples with emergency preparedness activities.

None of the case study countries in the *Dare to prepare: taking risk seriously* (Kellett and Peters, 2014) study (Haiti, Myanmar, Niger, the Philippines, Sudan) were currently receiving support from the Adaptation Fund at the time of this report. A project from Myanmar was recommended but had not yet been approved as it was proposed by a multilateral implementing agency (Adaptation Fund Board, 2013a). At present, only 50% of Adaptation Fund funding can be channelled through multilateral agencies, and all available funds have already been programmed.

### Key messages

The Adaptation Fund, focuses on adaptation to climate change, and therefore its scope is around 'natural hazards' and in specific climate-related hazards. However, the Fund has included some emergency preparedness activities within its remit of financial support since its agreement in 2001, and has been successful in including in particular the development of early warning systems within its results framework, guaranteeing financial support for such activities in their projects. This reflects the strong relationship between preparedness and climate change adaptation. The strategy of including emergency preparedness activities under the overall results framework proves to be an effective and straightforward way to assure funding for emergency preparedness activities (in this case early warning systems). Unless concerted and effective advocacy takes place, expanded focus on emergency preparedness with the Fund's limited resources in the near term is unlikely.

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# Financing of emergency preparedness and the Least Developed Country Fund (LDCF)

Alice Caravani and Smita Nakhooda

## Introduction

The purpose of this analysis is to examine the financing mechanism in light of the emergency preparedness activities (defined as outlined in the matrix in the report *Dare to prepare: taking risk seriously* (Kellett and Peters, 2014)). To what extent are these mechanisms currently being used for emergency preparedness activities?

The Least Developed Country Fund (LDCF) is a multilateral fund under the United Nations Framework Convention on Climate Change (UNFCCC), which was established in 2001 to respond to the adaptation needs of least developed countries (LDCs). The LDCF has primarily financed the preparation and implementation of National Adaptation Programmes of Action (NAPAs) to identify priority adaptation actions for a country, based on existing information. It has also funded discrete projects identified through the NAPA process. The LDCF is administered by the Global Environment Facility (GEF), and takes guidance from the Conference of the Parties to the UNFCCC as well as the GEF council.

The LDCF focuses on reducing the vulnerability of those sectors and resources that are central to development and livelihoods, such as water; agriculture and food security; health; disaster risk management and prevention; infrastructure; and fragile ecosystems (see Figure 1).

### Box 1. Additional costs covered by the LDCF

The full adaptation cost translates into the term “additional cost” in COP decisions and LDCF/Special Climate Change Fund (SCCF) programming papers. This concept is used to explain how the costs of adaptation are added to costs of business-as-usual development. Business-as-usual refers to activities that would be implemented also in absence of climate change. The full costs of adaptation are fully paid by the LDCF/SCCF.

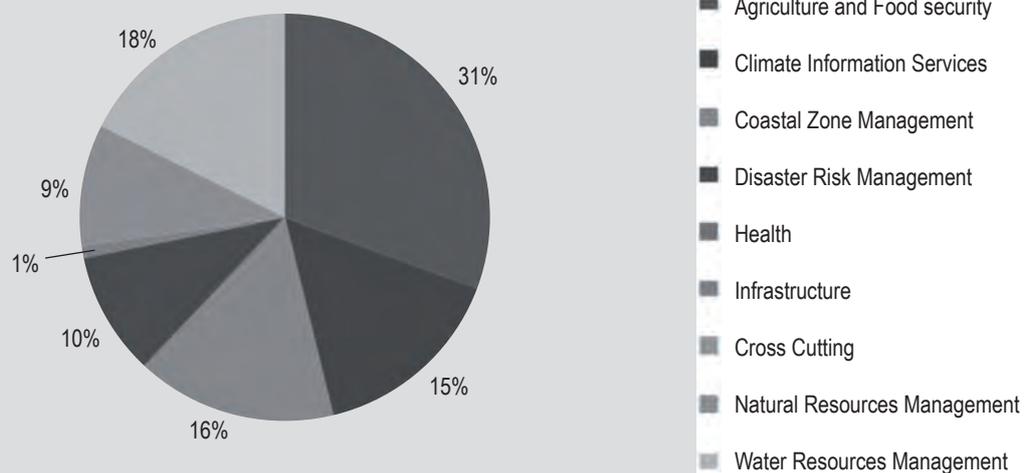
Source: GEF (2011: 14).

It only funds the additional costs of immediate adaptation needs over a development Business-as-Usual baseline (Biagini and Dobardzic, 2011). Therefore each project has to justify the adaptation components, with specific cost estimates.

In order to understand the extent to which the LDCF has funded emergency preparedness activities this review considered the following:

- The full project portfolio consisting of 148 projects, and reviewed on the basis of project titles and highlighted projects related to crisis, conflict, natural hazards, risks or other hazards.

Figure 1. Distribution of resources in LDCF



Source: LDCF Web site <http://www.thegef.org/gef/ldcf> Accessed 2013.

- Of the 148 projects, 33 were highlighted and further analysed applying the emergency preparedness matrix. For these 33 projects, a quick review of the main project documents was undertaken.
- Of the 148 projects, 81 mainly for formulation or implementation of NAPAs were also highlighted, but because of resource limitations were not analysed applying the emergency preparedness matrix.

Disaster risk management is the third last sector in terms of distribution of resources, sharing 10% of the total resources.

Table 1 shows that more than US\$150.26 million (or a third of the total funding approved by the LDCF to

date) addressed emergency preparedness activities (33 projects) between 2003 and 2013<sup>1</sup>.

The remainder of this analysis will focus on an in-depth analysis of the 33 projects mentioned above.

A total of 25 countries have contributed to the LDCF, with a total amount of US\$585.51 million deposited. The largest contributors to the fund have been Germany, the UK, Sweden, the USA and the Netherlands (see Figure 2).

<sup>1</sup> Least Developed Country Fund website: <http://www.thegef.org/gef/LDCF>. Accessed in September 2013.

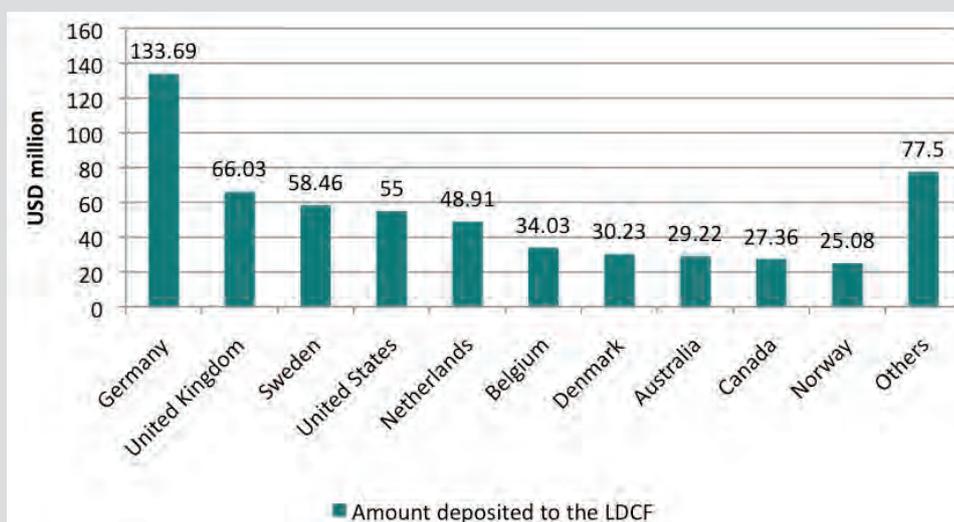
**Table 1. LDCF projects overview**

Projects reviewed	Not emergency preparedness relevant <sup>(1)</sup>	Some emergency preparedness relevance	Emergency preparedness relevant	Grand total
Amount approved all in the form of grants.	US\$135.32 million	US\$156.13 million	US\$145.54 million	US\$436.99 million
% of amount approved	31%	36%	33%	100%
Number of projects	34	81 (50 of which are NAPA formulation and/or implementation)	33	148
% of number of projects	23%	55%	22%	100%

Notes: (1) The 'relevance' of projects towards EP was assessed broadly following a similar approach of the Rio Markers where the not-emergency preparedness-relevant (coded as 0) are the ones that do not appear to target emergency preparedness objectives; Some emergency preparedness relevance (coded as 1) appear to target emergency preparedness objectives, even if not clearly spelled out in the projects title; emergency preparedness-relevant (coded as 2) are the ones that target emergency preparedness but can also target other objectives. Within the emergency preparedness-relevant, these have been further classified as either 'partially' or 'totally' targeting emergency preparedness depending on whether emergency preparedness appeared to be also accompanied or not by other objectives.

Source: Climate Funds Update Website (<http://www.climatefundsupdate.org>). Accessed in August 2013.

**Figure 2. LDCF contributors**



## Emergency preparedness activities currently supported by the LDCF

Most of the projects that target emergency preparedness are also targeting a number of adaptation activities that are not related to preparedness. For this reason we distinguished projects that are 'totally' (14 projects) targeting emergency preparedness, such as 'Strengthening Climate Information and Early Warning Systems', from those that are 'partially' (19 projects) targeting it such as 'Enhancing Climate Risk Management and Adaptation'.

Of the 33 projects that target emergency preparedness, 15 cover more than one component of the matrix. About 23 of these focus on early warning systems from the local to the national level. Ten projects focus on hazard and risk analysis. Both components (early warning systems and hazard and risk analysis) are also complemented by information and communication systems and community preparedness elements. This complementarity is a good sign as it shows that 'hardware' components (e.g. technologies to estimate weather forecasting) are complemented by 'software' such as the communication of climate risks (e.g. intensifying storms). This is found for example in a project funded in Tuvalu where the 'resilience of island communities to climate change variability and risks is strengthened through participatory island level planning, budgeting and execution and community led investments' (GEF, 2013).

Another component targeted by four LDCF projects is the formulation of institutional and legislative frameworks, which tend to be complemented by coordination measures – both government coordination mechanisms and national and sub-national leadership structures, and also in this case by community preparedness. One example is the establishment of community preparedness and evacuation plans as the basis of integrated Disaster Risk Management and Adaptation Plans (GEF, 2012a) in Vanuatu.

In summary, we find that LDCF projects that are targeting emergency preparedness are focusing mainly on:

- early warning, at different levels (e.g. national to local)
- institutions, legislation and coordination structures.

## Examples of good practice in funding emergency preparedness

The 'Community Based Flood and Glacial Lake Outburst Risk Reduction' in Nepal is a 'best practice' example. The project is funded by the LDCF through a grant of US\$6.3 million and co-financed by a number of other institutions (UNDP, USAID, ICIMOD, NRRC and the Government of Nepal) for a total amount of US\$20.35 million. The programme period is from 2013

to 2017. The general model has informed the design of a similar programme in Pakistan funded by the Adaptation Fund. The programme is designed to address the immediate concerns in the flood-prone areas of the country and to establish management frameworks and information systems that will provide a basis for stronger long-term disaster preparedness in the country. The project supports a number of components of the emergency preparedness matrix:

- hazard and risk analysis and early warning
- institutional and legislative frameworks
- information management and communication
- contingency preparedness and response planning.

## Country selection for emergency preparedness

The LDCF can only fund activities in Least Developed Countries (LDC). Nine of the countries that have used the LDCF to support emergency preparedness activities are also Small Island Developing States (SIDSs). This reflects the allocation criteria of the fund, which specifically require recipients to be LDCs. At the time of writing, 27 countries were receiving support for emergency preparedness activities under the LDCF, and these are listed in Table 3.

There appears to be little correlation between amount of finance approved for emergency preparedness activities and the level of vulnerability of these countries as measured by prominent indices such as the GAIN vulnerability index.

As shown in Figure 3, sub-Saharan Africa is the region that receives largest support on emergency preparedness activities, followed by Asia and Pacific, Europe and Central Asia (all to Afghanistan) and Latin America and the Caribbean.

The numbers are only indicative because of a lack of data available regarding the amount approved for each component. However, it is clear that hazard risk analysis and early warning are the components that receive substantial funding<sup>2</sup>.

The largest recipients are all countries highly vulnerable to climate change. As many of these are particularly vulnerable to natural disasters, such as the SIDSs that are exposed to unexpected cyclones, storms or other disasters, or other drought-affected countries such as Malawi and Ethiopia, there are many synergies between adaptation and emergency preparedness. The fact that the LDCF is primarily set to respond to the urgent needs

<sup>2</sup> As the amount of funding allocated to each component of the matrix is not available in the project documents, it was addressed by dividing the total amount approved for each project by the number of components each project supports.

**Table 2. Matrix components found in LDCF projects**

Preparedness matrix: categories of emergency preparedness		Extent these mechanisms are currently being used for emergency preparedness activities	Examples of recipient countries
Hazard and risk analysis and early warning	Early warning systems (local, national, regional and international) Hazard and risk analysis	33 (58% of total) <sup>(2)</sup> projects include this component Example: Early warning systems (on climate change induced risks including new or emerging vulnerabilities and hazards)	Nepal, Gambia and Rwanda.
Institutional and legislative frameworks	Institutional and legislative frameworks, resource allocation and funding mechanisms National Plan of Action, National Platform, National Disaster Management Authority Regional agreements International agreements	5 (9% of total) projects include this component Example: Institutional Strengthening for Climate Change and Disaster Risk Management	Nepal, Vanuatu, Kiribati, Maldives, Bhutan
Resource allocation and funding	National and regional risk pooling mechanisms International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency program budgets (internal)	Not specifically addressed in any projects.	—
Coordination	Government coordination mechanisms National and sub-national leadership structures Inter-agency coordination – national and sub-national Cluster- and sector-established contextual standards	3 projects include this component Example: Establishing fully equipped provincial disaster coordination centres and provincial disaster risk management and climate change adaptation plans.	Bhutan, Vanuatu
Information management and communication	Information management systems – national, regional and international Communication systems Cluster and sector information management systems – GIS, 3/4W's	6 (9% of total) projects include this component Example: Strengthening the communications and networks in support of early warning systems.	Sudan, Nepal, Tuvalu, Bhutan, Rwanda
Contingency preparedness and response planning	Community preparedness Contingency preparedness and response planning	11 (19% of total) projects include this component Example: Increased institutional and community capacity for responding to climate change risks through preventative planning.	Nepal, Burundi, Lao, Tuvalu, Liberia, Vanuatu, Angola, Bhutan, Rwanda, Haiti, Afghanistan
Training and exercises	Simulations, drills – with the presence of national or international actors. or both Accredited training opportunities Specific country-context training opportunities	Not specifically addressed in any projects.	—
Emergency services and standby arrangements and pre-positioning	Stockpiling – national, regional and international Civil protection, emergency services, search and rescue Contingency partnership agreements – national, regional and international	Not specifically addressed in any projects.	—

Notes: (1) The total represents the total number of observations, so it is higher than the total number of projects, as each project covers more than one component.

## Box 2.

### Brief description

Nepal is one of the most disaster-affected countries in the world and among the top ten countries that are most affected by climate-related hazards. Nepal's economic and human development have been greatly constrained by the country's mountainous terrain, lack of access to the sea and its high susceptibility to natural disasters, particularly floods, landslides, windstorms, hailstorms, earthquakes, forest fires, glacial lake outburst floods (GLOFs) and avalanches.

Climate change is projected to increase the severity and unpredictability of flooding and will also increase the risk of potentially catastrophic GLOFs in the high mountains as glaciers retreat and glacial lakes expand. A recent report on disaster risk reduction concluded that as climate change impacts increase, more than 1 million people in Nepal would become vulnerable to climate-induced disasters every year.

The Government of Nepal is acutely aware of the growing problems the country faces due to existing and future climate-related hazards. However, there are a number of key barriers that must be overcome. LDCF support will help the Government of Nepal to overcome some of the key barriers to managing the growing risks of GLOFs in the high mountains and flooding in the Tarai and Churia Range of southern Nepal through a strong emphasis on community engagement, empowerment and social inclusion. At present there is insufficient institutional knowledge and capacity to understand and manage GLOF risks, as they are highly complex, site specific and too costly; and at the same time there is a lack of cohesion among different agencies to manage the risks associated with recurrent flooding in the Tarai in current on-going programmes. The support will assess the gaps and help increase the institutional knowledge and capacity of the various stakeholders and also build the limited capacity and understanding among local communities regarding ways to reduce their vulnerability to GLOFs in the mountains and flooding in Tarai. It will improve information sharing and coordination at the central and local levels and among the various ministries, departments and non-governmental actors.

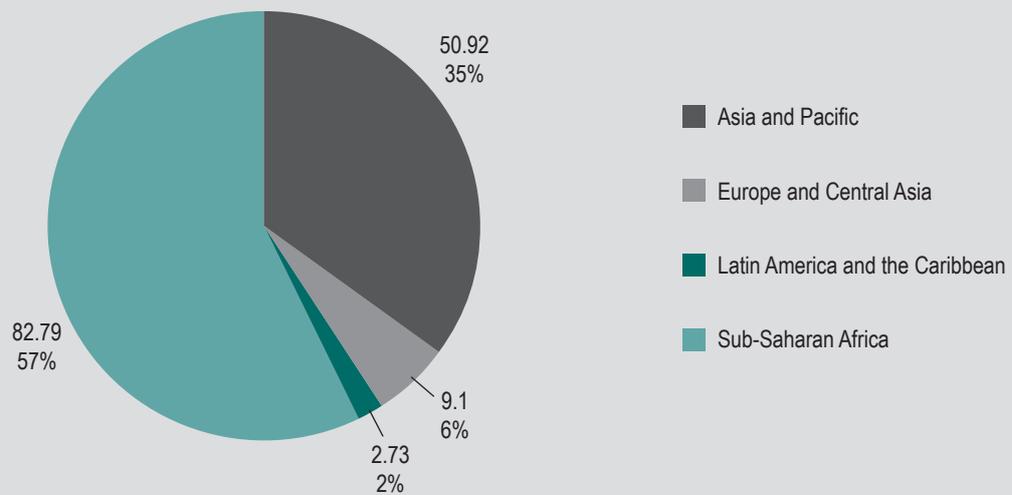
Under the first component, the project strategy for reducing GLOF risks arising from Imja Lake posing a threat to local populations, material assets and tourists visiting Sagarmatha (Mount Everest) National Park will have significantly reduced by reducing the lake volume through an artificial, controlled drainage system combined with a community-based early warning system (CBEWS). Under the second component, the project strategy for reducing human and material losses from recurrent flooding events in 4 flood-prone districts (Mahottari, Siraha, Saptari and Udayapur) will have increased the adaptive capacity of local communities in eight VDCs of 3 river basins (Ratu, Khando, Gagan) and two tributaries Hadiya and Kong through locally-appropriate structural and non-structural measures, including flood-proofed water and sanitation systems, a sediment control programme, river bank and slope stabilisation and the implementation of CBEWS. The sediment control programme in Ratu river, the first of its kind in Nepal, will demonstrate the critical importance of managing upstream-downstream linkages in any riverine flood risk management programme. Through this support, in addition to strengthening and building capacity of key local and national institutions and stakeholders to manage GLOF and lowland flood risks in Nepal, approximately 96,562 vulnerable people will be directly benefited by these interventions.

Source: GEF (2012b).

**Table 3. Recipients of emergency preparedness activities funded by LDCF**

Recipient country	Approved amount (US\$ million) for emergency preparedness activities
Bhutan	14.94
Burundi	11.80
Afghanistan	9.10
Gambia	8.93
Zambia	8.35
Angola	8.35
Samoa	6.35
Nepal	6.30
Sudan	5.70
Lao PDR	4.70
Timor Leste	4.60
Maldives	4.25
Tuvalu	4.20
Benin	4.00
Burkina Faso	4.00
Ethiopia	4.00
Malawi	4.00
Sao Tome and Principe	4.00
Sierra Leone	4.00
Tanzania	4.00
Uganda	4.00
Rwanda	3.16
Kiribati	3.00
Liberia	2.90
Haiti	2.73
Vanuatu	2.58
Lesotho	1.60

**Figure 3. Regional allocation of emergency preparedness activities funded by LDCF**



**Table 4. Funding to specific emergency preparedness components**

	Matrix components							
	Early warning systems (local, national, regional and international)	Hazard and risk analysis	Institutional and legislative frameworks, resource allocation and funding mechanisms	Government coordination mechanisms	National and sub-national leadership structures	Information management systems – national, regional and international	Communication systems	Community preparedness
Amount approved (US\$ million)	73.23	23.30	8.52	0.65	6.39	1.73	7.16	24.57

of adaptation, which tend to include preparedness for unexpected events, makes it a good mechanism in these contexts.

It is interesting to note that although LDCF does not address conflict issues explicitly, it often funds programmes in conflict-affected countries such as Sudan and Afghanistan.

### Monitoring emergency preparedness within the LDCF

The Adaptation Monitoring and Assessment Tool (AMAT) – currently in a pilot phase – measures progress toward achieving the outputs and outcomes established at the portfolio level under the LDCF/SCCF results framework. This tracking tool will be applied three times during the life of the project<sup>3</sup>. One output indicator of the LDCF is: 'Type

and level of integrated disaster response measures to extreme climate events introduced to increase number of lives saved', which is used to assess the achievement of Objective 1: 'Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level'. The AMAT does not contain any specific reference to emergency preparedness, but such an output indicator could be interpreted to include preparedness elements.

### Evaluating emergency preparedness opportunities

A Joint External Evaluation of the LDCF was undertaken in 2009 by COWI and IIED (COWI/IIED, 2009). It stressed that:

*The LDCF relies upon voluntary financial contributions from countries – parties to the UNFCCC. The size and unpredictability of available funding of the LDCF precluded effective support of programmatic responses to the adaptation needs identified.*

<sup>3</sup> Climate Change Adaptation – LDCF/SCCF Adaptation Monitoring and Assessment Tool – Global Environment Facility. See [http://www.thegef.org/geff/tracking\\_tool\\_LDCF\\_SCCF](http://www.thegef.org/geff/tracking_tool_LDCF_SCCF)

*The modus operandi of the LDCF meant that it has been predominantly project and sector focused, rather than addressing thematic approaches. Of the over 390 NAPA priority projects identified in the 41 completed NAPA reports, 90% address sectoral and 10% cross-sectoral adaptation needs.*

Both findings indicate limitations to the effectiveness of the fund in supporting emergency preparedness activities, which require predictable funding, and an emphasis on cross sectoral interventions.

Another important suggestion from the COWI/IIED (2009) review was that LDCF resources should be invested in developing an understanding across different LDCs of the true escalating costs of climate change, leading to a better understanding of what are the main adaptation needs, in order to identify the priority areas that should receive more funding from the LDCF. This could be done by assessing costs and benefits of climate change adaptation using NAPA priority activities as case studies. Since natural disasters pose significant costs, such analysis suggested might help build the case for LDCF support for emergency preparedness activities.

A broader finding of the COWI/IIED (2009) evaluation was the need for the LDCF to better incorporate NAPA's findings into the fund's priority activities. This would also require a regular update (e.g. every two years) of the NAPAs.

Country interest and commitment to emergency preparedness-related activities is quite central to their prioritisation by the LDCF. For example, the Malawi NAPA process identified 31 adaptation options from eight sectors to address urgent adaptation needs. The emphasis was on vulnerable rural communities. The 31 were ranked using multi-criteria analysis and a 15-item short list of priority adaptation options was developed. These were further ranked and prioritized for urgency, and the list of five top priority and urgent actions were:

- Improving community resilience to climate change through the development of sustainable rural livelihoods.
- Restoring forests in the Upper and Lower Shire Valleys catchments to reduce siltation and associated water flow problems.
- Improving agricultural production under erratic rains and changing climatic conditions.
- Improving Malawi's preparedness to cope with droughts and floods.
- Improving climate monitoring to enhance Malawi's early warning capability and decision-making capacity.

In this case, the in-country stakeholder process resulted in some emphasis on emergency preparedness activities.

## Potential for expansion<sup>4</sup>

The LDCF primarily funds NAPAs, which focus 'on urgent and immediate needs, for which further delay could increase vulnerability or lead to increased costs at a later stage' (UNFCCC Web site).<sup>5</sup> In this context, preparedness activities (specifically for natural hazards, but not conflicts) should be priorities, although in practice there is an observed tendency for countries to prioritise "concrete investments" in "hard infrastructure" related programmes.

One indicator of the AMAT is based on 'integrated disaster response measures'. This could be interpreted as an incentive to include emergency preparedness aspects and possibly expanding the support for these in order to reduce vulnerability at local, national, regional and global levels (Objective 1 of the AMAT, as mentioned earlier).

## Pros and cons of emergency preparedness expansion

### Pros

By increasing financial support to emergency preparedness activities the LDCF would show better integration of the priorities outlined in the NAPAs by recipient countries. Because of the urgency of dealing with emergency preparedness now, the fund would also have a chance to show improved efficiency in terms of responding directly to these needs instead of further delaying its responses.

### Cons

If emergency preparedness activities are not established in order to build the resilience needed for long-term changes but instead to respond to sporadic events, they might be less consistent with long-term adaptation needs.

## The challenges of expansion

The LDCF only funds costs that are additional to a Business as Usual (BAU) development (activities that would be implemented also in the absence of climate change, such as increasing access to education).

<sup>4</sup> It should be noted here that whether or not mechanisms are currently being used for emergency preparedness is not necessarily a guide that they should be. Existing investigation into the usage of existing mechanisms has found examples of emergency preparedness in almost all of them. However, this has been somewhat an accident of the system. For the purposes of this work one needs to understand the practical possibilities of using a particular mechanism, not just the history of that mechanism.

<sup>5</sup> UNFCCC website: [https://unfccc.int/national\\_reports/napa/items/2719.php](https://unfccc.int/national_reports/napa/items/2719.php). Accessed in September 2013.

Therefore support for emergency preparedness activities from the LDCF would need to clearly lay out the additional costs that climate change poses relative to emergency preparedness needs without climate vulnerability. An in-depth analysis of the climate relevance of the emergency being addressed would be needed. Analytically, this is likely to be quite challenging. This approach to adaptation finance may not be well suited to emergency preparedness finance on a practical level, either because of the current lack of coordination mechanisms in place to deal with emergency and adaptation issues, or because of the high costs involved in such interventions.

A suggested approach to an expansion to better support emergency preparedness could include:

- support in country stakeholders to identify the links between national and sub-national emergency preparedness efforts and adaptation initiatives, particularly in the context of formulating their NAPs and NAPAs;
- help raise awareness at UNFCCC bodies and the GEF council of the links between emergency preparedness finance and adaptation finance, and the potential synergies between these initiatives, with due respect for the principles of the UNFCCC as they pertain to climate finance; and
- share analysis that demonstrates the cost-effectiveness of expanding support for emergency preparedness activities in avoiding future costs related to the adaptation to climate change (e.g. through practical examples that show that if you invest more now in preparing communities to deal with a disaster, then more lives will be saved, and the economy will be able to recover more quickly).

## Likely effect of expansion on case study countries

Haiti and Sudan both receive support for emergency preparedness activities under the LDCF. Haiti in 2012 received US\$2.73 million from the LDCF for the 'Strengthening Climate Resilience and Reducing Disaster Risk in Agriculture to Improve Food Security in Haiti Post-Earthquake' project, with the objective to improve agricultural emergency preparedness through climate hazard resilience in a context prone to hurricane-related disasters, and supporting the food security of small-scale farmers (GEF, 2012c). The project is implemented by FAO and it is the second NAPA implementation project. The project document anticipates how 'the additional funds provided by the LDCF will allow for a strengthening of capacities from the local-level perspective (support for disaster risk prevention and preparedness in rural Community-Based

Disaster Risk Management Plans (CBDRM) integrated into sectoral development plans at municipality and district level). The LDCF resources in the adaptation scenario will also allow for strengthening of institutional and technical capacities for support to adoption of climate change adaptation practices in crop production systems, building linkages to policies, strategies and capacities at the national level supporting the mainstreaming of adaptation measures and climate change safeguards in the agriculture development and natural resources and disaster risk management framework and strategies'.

In Sudan in 2012, the LDCF approved the 'Climate Risk Finance for Sustainable and Climate Resilient Rain-fed Farming and Pastoral Systems' project. The NAPA document prioritises the establishment of a drought early warning system, including enhancement of capabilities of regional meteorological stations to monitor hydro-climatic variables, community-based disaster preparedness measures, and micro-credit programmes in support of adaptation measures. In the context of advancing the implementation of these priorities, the Government of Sudan has requested LDCF funding to introduce climate risk finance mechanisms (e.g. risk insurance mechanisms) to achieve resilience of rain-fed farmer and pastoral communities in regions of high rainfall variability (GEF, 2012d). To prepare for rare but high severity events, transferring risk through the insurance may be more viable than trying to shore up limited resources and directly prevent possible losses.

## Summary and key messages

The LDCF is currently spending a considerable share of resources (more than one-third of its total budget) on natural hazard-related emergency preparedness activities.

These are only applicable in contexts related to climate change, as the LDCF only funds the additional costs of climate change over a baseline development scenario.

The fund is dependent on financial voluntary contributions from donor countries. There is a lack of predictability of funding that poses challenges. The future of the Fund is also somewhat uncertain in light of the operationalisation of the Green Climate Fund.

If countries prioritise emergency preparedness activities in their adaptation strategies, then the LDCF should respond to these needs. The use of cost-benefit analysis may help make the business case for such interventions (Kellest and Harris, 2012).

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# Financing of emergency preparedness and the Pilot Program for Climate Resilience

*Margot Hill Clarvis*

## Introduction

The Pilot Program for Climate Resilience (PPCR) is a targeted programme of the Strategic Climate Fund (SCF), one of two funds within the framework of the Climate Investment Funds (CIF).<sup>1</sup> The financing window aims at jump-starting climate-smart development, by piloting and demonstrating ways to integrate climate risk and resilience into country core development planning. The PPCR supports funding for activities that address climate resilience: technical assistance to enable developing countries to build upon existing national work to integrate climate resilience into national and sectoral development plans; and public and private sector investments identified in national or sectoral development plans or strategies and addressing climate resilience. The focus is on piloting projects that integrate climate risk and resilience into core development planning, while complementing other on-going activities of the CIF, thus leading to increased awareness of the potential impact of climate change, improved coordination for climate resilience, and scaled up investment for broader investments (CIF, 2011b).

Although PPCR is not an emergency preparedness-focused financing window, some entry points for emergency preparedness activities are apparent through projects that relate to climate services and disaster and climate risk reduction (climate forecasting systems, climate data provision, improvement of hydro-meteorological services, and operationalisation of early warning systems), risk (drought, flood and natural hazards management), climate resilient infrastructure and climate proofing (CFU, 2012). So far US\$1.3 billion has been pledged by donors (Australia, Canada, Denmark, Norway, Germany, Spain, Japan, UK and USA) for implementation by national governments of the pilot countries and regions<sup>2</sup>

with the support of the implementing multi-lateral development banks (MDBs) and close collaboration with other development partners including UN and bilateral agencies (PPCR, 2013c). The World Bank Group (which also serves as Trustee and Administrating Unit of the PPCR), the African Development Bank, the Asian Development Bank, the European Development Bank, and the Inter-American Development Bank are the implementing agencies for PPCR investments. A set of pilot programmes have been prioritised to provide pilot finance in the short term so as to learn lessons that will be useful in designing scaled-up adaptation financing. The pilot projects (reviewed and endorsed by the PPCR Sub-Committee [SC]) are country led, build on National Adaptation Programmes of Action (NAPAs), and are strategically aligned with other sources of adaptation finance, such as the Adaptation Fund, UNDP and other donor-funded activities.

## Emergency preparedness activities and PPCR

PPCR is designed to deliver additional finance to countries for integrating climate resilience into development planning and investments, including the blending of grant and highly concessional loans with domestic public and private financing. Both grants and concessional loans will be available to finance the additional costs necessary to make a project climate resilient (ALM, 2009). Pilot countries (proposed by an Expert Group<sup>3</sup> as part of the SC) are initially financed and supported in order to establish Strategic Programs for Climate Resilience (SPCRs). All endorsed SPCR include emergency preparedness-relevant investments for strengthening climate data and hydromet services either as stand-alone projects or as components of technical assistance or investment projects or programmes, and all MDBs are

<sup>1</sup> The CIF comprises the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF). The PPCR sits under SCF, along with two other financing windows, the Forest Investment Programme (FIP) and the Program for Scaling-Up Renewable Energy in Low Income Countries (SREP). Both the CTF and the SREP finance low carbon, clean technology and development. The FIP supports developing country efforts to reduce deforestation and forest degradation and promote sustainable forest management that leads to emissions reductions and enhancement of forest carbon stocks (REDD+).

<sup>2</sup> Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, and Zambia. The Caribbean region comprises Grenada, Haiti,

St. Vincent and the Grenadines, Saint Lucia. The Pacific region is comprises Papua New Guinea, Samoa and Tonga.

<sup>3</sup> The initial expert group comprised of: Mr Nick Brooks (University of East Anglia, UK), Mr Nobuo Mimura (Ibaraki University, Japan), Mr Shardul Agrawala (OECD, India), Mr Leonard Nurse (Center for Resource Management and Environmental Studies, Barbados), Mr Ian Burton (University of Toronto, Canada), Mr Saleem Huq (IIED, Bangladesh), Ms Rosa Perez (International Development Research Center, Canada), Ms Balgis Osman-Elasha (HCENR, Sudan) (PPCR, 2013c). See: [https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Approval\\_of\\_Experts\\_to\\_Serve\\_on\\_the\\_Expert\\_Group\\_for\\_PPCR.pdf](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Approval_of_Experts_to_Serve_on_the_Expert_Group_for_PPCR.pdf)

supporting one or more of these projects (CIF, 2014). Furthermore, for the last 18 months hydromet services have been a priority knowledge area for the World Bank (PPCR, 2013d).

The PPCR SC<sup>4</sup> is responsible for approving programming priorities, operational criteria and financing modalities for the PPCR, selecting pilot countries and approving PPCR financing for programmes, as well as ensuring that activities of the PPCR complement the activities of other development partners in order to maximise synergies and avoid overlap (CIF, 2011b). Table 1 details the different components of emergency preparedness supported by different key objectives of the PPCR, as they relate to the overall aim of integrating climate risk and resilience into core development planning and implementation. Since the MDBs are the implementing entities of PPCR financing, it is their own operational policies and procedures that apply, including when working with *de facto* governments, or in conflict or post-conflict zones (PPCR, 2013c).

PPCR finance includes grant finance (up to US\$1.5 million to prepare the SPCR in phase 1), preparation grants (estimated US\$1.5 million for detailed preparation of activities in phase 2), and finally both grants and concessional loans to finance the additional costs necessary to make a project climate resilient (Andrea Kutter, CIF Administrative Unit, pers. comm., Aug. 2013). The mix of loans and grants has been controversial, but the World Bank has emphasised that a recipient country can accept the grant component without the loan component. Furthermore, Highly Indebted Poor Countries will not be eligible for loans, in order to avoid further debt burdens (CFU, 2012).

### Examples of good practice in funding emergency preparedness

In Cambodia, proposed PPCR financing will contribute to strengthening the capacity of the government and affected communities to reduce the risks associated with climate extremes, namely flood and drought events (PPCR, 2013a). The Cambodian government drafted its PPCR investment plan in coordination with the Asian

Development Bank (ADB), members of the World Bank Group (IBRD, IFC), key Cambodian stakeholders, and other development partners. In June 2011, the PPCR SC endorsed the government's Strategic Program for Climate Resilience (SPCR) with a funding envelope of up to US\$86 million (US\$50 million in grants and up to US\$36 million in concessional credit). Of this, an allocation of US\$14 million (US\$8 million concessional credit and US\$6 million grant) was agreed for 'Enhancement of Flood and Drought Management and Mitigation in Pursat and Kratie Provinces', as sub-projects under the ADB-funded Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project (ADB, 2012).

PPCR concessional credit (US\$4 million) will finance the incremental costs associated with ensuring the structural subproject is more climate resilient and to increase climate resilience through accompanying non-structural measures. The PPCR grant (US\$5.8 million) will finance the costs of non-structural measures to strengthen the capacity of the government and affected communities to reduce the risks associated with climate extremes, namely flood and drought events. The key measures are (i) an effective early flood and drought warning system to improve the communication system among Department of Meteorology, the Provincial Department of Water Resources and Meteorology, Provincial Committee for Disaster Management, and the Farmer Water User Committees; (ii) improved hydraulic design standards in the Mekong Delta; (iii) technical assistance to build community capacity to better manage and mitigate risks associated with increasing climate extremes, including the use of early warning systems, which will build on coping strategies and mechanisms of communities and promote community-based disaster risk reduction and management; and (vi) promoting adaptation measures (PPCR, 2012b).

PPCR SC approved funding for the project in November 2012 (PPCR, 2012a) and this has so far led to an increase in the level of interest and attention of senior policy-makers to consider climate resilience from a holistic perspective (CIF, 2012a). The project is now moving from Phase I (in-depth studies on mainstreaming climate resilience into development planning at national and sub-national levels) to Phase II (specific projects on drought and flood resilience) (CIF, 2013b).

### Country selection for emergency preparedness

The PPCR SC determined the range of countries to be supported by PPCR financing as the pilot targets, taking into account, *inter alia*, the resources available for the PPCR and the objective of providing scaled-up resources

<sup>4</sup> SCF Trust Fund Committee established the PPCR SC, comprising six representatives from contributor countries to the PPCR, identified through a consultation process among contributor countries (Australia/Canada, Denmark/Norway, Germany/Spain, Japan, UK, USA); six representatives from eligible recipient countries to the PPCR, identified through a consultation among such countries (Dominica, Haiti, Nepal, Niger, Samoa and Tajikistan); a developing country Chair or vice-Chair of the Board of the Adaptation Fund; a representative of a recipient country when a programme from such a country is under funding consideration by the SC; four civil society representatives (from Asia, LAC, Africa and developing countries, respectively); two private sector representatives (one from a developed country and one from a developing country); one community-based organisation; and two Indigenous Peoples representatives.

**Table 1. Preparedness matrix demonstrating aspects of emergency preparedness addressed by the PPCR**

Preparedness matrix: categories of emergency preparedness		Extent that these mechanisms are currently being used for emergency preparedness activities
Hazard and risk analysis and early warning <sup>(1)</sup>	Early warning systems (local, national, regional and international) Hazard and risk analysis	Indicator 3: Climate responsive instruments and investment models are those that incorporate climate variability and climate change considerations or can be applied to enhance the climate resilience of people, products or services. Such as: technologies or infrastructure investments (e.g. improvements to hydro-meteorological systems); or data and technical assets (e.g. climate scenarios, forecasts, vulnerability assessments, climate risk and impact analyses, maps, needs assessments and guidelines and manuals).
Institutional and legislative frameworks <sup>(1)</sup>	Institutional and legislative frameworks, resource allocation and funding mechanisms National Plan of Action, National Platform, National Disaster Management Authority Regional agreements International agreements	Indicator 1 – Degree of integration of climate change in national, including sector, planning; depth of the process of integration of climate resilience within national, ministry and sector planning. Embedding of climate resilience priorities into new and existing development planning, including sector planning relevant to processes for developing strategies, policies, plans, laws, regulations and institutional arrangements to promote and integrate climate resilience. Building institutional capacity: specific measures to address climate resilience identified and prioritized, e.g. laws, regulations and incentives in these policies and plans. Indicator 2 - strengthened government capacity and coordination mechanism to mainstream climate resilience. Indicator 3 – Extent to which vulnerable households, communities, businesses, and public sector services use improved PPCR supported tools, instruments, strategies and activities to respond to climate variability or climate change. Financial instruments (e.g. micro-insurance, micro-finance, small grants and loan facilities).
Resource allocation and funding	National and regional risk pooling mechanisms International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)	Not specifically addressed in objectives.
Coordination	Government coordination mechanisms National and sub-national leadership structures Inter-agency coordination – national and sub-national Cluster - and sector-established contextual standards	Limited in relation to emergency preparedness: but in Indicator 2 (Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience), the coordination mechanism does refer to the relevant committee and institutional arrangement as laid out in the SPCR for the purposes of developing and overseeing the achievement of PPCR programme goals in the country.
Information management and communication	Information management systems – national, regional and international Communication systems Cluster and sector information management systems – GIS, 3/4W's	Indicator 3: Climate-responsive instruments and investment models are those that incorporate climate variability and climate change considerations or can be applied to enhance the climate resilience of people, products or services, such as: Technologies or infrastructure investments (e.g. improvements to buildings, agricultural, coastal, hydro-meteorological, transport, water, drainage, ICT and energy systems); Data, analytical work, technical studies, and knowledge assets (e.g. climate scenarios, forecasts, vulnerability assessments, climate risk and impact analyses, maps, needs assessments and guidelines and manuals); Public awareness platforms (e.g. information dissemination platforms, weather information services, media campaigns, knowledge sharing events, stakeholder networks, Web sites and e-learning platforms); Public and community services (e.g. services providing water, sanitation, transport, flood protection, irrigation, early warning, social protection, education and health).

**Preparedness matrix: categories of emergency preparedness**      **Extent that these mechanisms are currently being used for emergency preparedness activities**

Contingency and preparedness and response planning	Community preparedness Contingency / Preparedness and Response Planning	Not specifically addressed in objectives.
Training and exercises	Simulations, drills – with the presence of national or international actors, or both Accredited training opportunities Specific country-context training opportunities	Not specifically addressed in objectives.
Emergency services and standby arrangements and pre-positioning	Stockpiling – national, regional and international Civil Protection, Emergency Services, Search and Rescue Contingency partnership agreements – national, regional and international	Not specifically addressed in objectives.

Notes: (1) Categories most provided for by the PPCR.

Sources: PPCR Monitoring and Reporting Toolkit (CIF, 2013a); PPCR Revised Results Framework (CIF, 2012b).

in the pilot countries<sup>5</sup>. Countries were selected for the pilot programme based on a range of climate-related natural hazard types, levels of country vulnerability, country eligibility<sup>6</sup>, country distribution, coherence with existing adaptation funding and value added, replicability, sustainability, scalability and development impact, and the potential to implement rapid results (CIF, 2011b). Nine countries and two regions were selected to participate in the pilot programme (PPCR, 2013d). Each country is able to receive investments up to US\$110 million. The nine countries are Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen and Zambia. The Caribbean region comprises Grenada, Haiti, St. Vincent and the Grenadines, and Saint Lucia. The Pacific region comprises Papua New Guinea, Samoa and Tonga (PPCR, 2013d).

After selection, the relevant MDBs and any applicable UN agencies conduct a joint programming mission to engage with the government, appropriate UN offices in the country, private sector, national civil society and other stakeholders on how the pilot programme might assist

the government to enhance the climate resilience of their national development plans, strategies and financing. Proposals for PPCR funding are prepared jointly by the recipient country and the relevant MDBs (CIF, 2011b).

In most cases, the amount disbursed also include a substantial investment as a project preparation grant (often in the range of US\$0.2 to 0.6 million). Most pilot countries received up to US\$1.5 million in initial start-up financing to prepare the SPCR in order identify the key vulnerabilities that needed to be addressed within the country. The majority of the projects relate to emergency preparedness categories of risk analysis and early warning; institutional and legislative frameworks; and information management and communication. From the emergency preparedness perspective, the focus has been on developing climate information and services, early warning and risk reduction strategies from informational, technical and institutional infrastructure perspectives. Of the 62 projects and programmes in the PPCR portfolio at the time of writing, 10 projects or programmes are categorised as ‘Climate information systems and disaster risk management (DRM)’ (US\$154 million indicative; US\$97 million approved) and a further 11 as ‘creating an enabling environment’ (US\$96 million indicative; US\$64 million approved) (PPCR, 2013d).

### Evaluating PPCR

PPCR’s semi-annual operational report for 2013 (PPCR, 2013d) and the 2013 independent evaluation (by the independent evaluation departments of the MDBs) of the development and organisational effectiveness of the CIF (ICF, 2013) point to a set of key conclusions:

<sup>5</sup> In addition, an Expert Group was established by the PPCR SC to make recommendations on the selection of countries that will receive financing under the PPCR. Country access also required ODA-eligibility (according to OECD/DAC guidelines); and the existence of active MDB country programmes. Priority was also given to highly vulnerable Least Developed Countries eligible for MDB concessional funds, including the Small Island Developing States (CFU, 2012).

<sup>6</sup> Process of Selection: Country eligibility of the PPCR will be based on: (a) Official Development Assistance (ODA)-eligibility (according to OECD/DAC guidelines); and (b) an active MDB country programme. For this purpose, an “active” programme means where an MDB has a lending programme and/or on-going policy dialogue with the country. Priority will be given to highly vulnerable Least Developed Countries eligible for MDB concessional funds, including the Small Island Developing States among them (CIF, 2011b).

**Table 2. Overview of activities currently financed by PPCR that relate to emergency preparedness activities**

Project description	Type of finance	Amount approved (US\$ million)	Country
Project for the Improvement of Climate Forecasting Systems and Operationalization of Early Warning Systems	Grant & Concessional Loan	3.5	Niger
Climate Risk Management and Rehabilitation of Small- and Medium-scale Irrigation Schemes in the Tonle Sap Basin	Project Preparation Grant	0.6	Cambodia
Enhancement of Flood and Drought Management in Pursat Province	Grant & Concessional Loan	9.96	Cambodia
Disaster vulnerability reduction project	Project preparation grant	0.24	Dominica
Disaster vulnerability and climate risk reduction project	Concessional Loan	0.27	Grenada
Improving Climate Data and Information Management	Grant	0.45	Jamaica
Climate resilience: Transforming Hydro-Meteorological Services	Grant	10	Mozambique
Building Resilience to Climate Related Hazards	Grant & Concessional Loan	31	Nepal
Identifying and Implementing Practical CCA and Related DRR Knowledge and Experience	Project preparation grant	0.32	Regional – Pacific
Mainstreaming CCA and Related DRR	Project preparation grant	0.13	Pacific Region
Disaster Vulnerability and Climate Risk Reduction Project	Grant & Concessional Loan	10	St Vincent and Grenadine
Improvement of Weather, Climate and Hydrological Delivery Project	Grant	7.2	Tajikistan
Climate Information System and PPCR Programme Coordination	Project preparation grant	0.5	Yemen

Source: CFU (2012).

- PPCR's technical and financial assistance aims to play a catalytic role in assisting the governments' efforts to lead, organise and manage climate adaptation-related activities; with important investments in climate data and hydromet services to ensure the appropriate design and sustainability of PPCR supported investments. This approach is seen to have the potential to put PPCR in a pivotal role relative to other adaptation finance (i.e. Adaptation Fund, LDCF or SCCF projects might fit within a PPCR strategic programme), with its focus at a higher level and more programme-oriented approach (as opposed to project) to climate risk and resilience.
- Varied quality of the 19 endorsed SPCRs as well as individual projects and programmes (in their

country-specific articulation of 'transformational change towards climate resilience').<sup>7</sup>

- Issues relating to the slowdown in the submission of PPCR projects and programmes for PPCR funding approval. All but three recipients under PPCR were able to achieve investment plan endorsement within the suggested timeframes, for a success rate of 80% as of December 2012. Projects in the PPCR took 3 to 18 months from last mission to investment plan endorsement.

<sup>7</sup> Transformational impact is understood as the PPCR's ultimate objective to contribute to the CIF-level outcome of improved climate resilient development through increased resilience of households, communities, businesses, sectors and society to climate variation and climate change, and through strengthened climate responsive development planning (ICF, 2013).

- Fund efficiency and programme delivery costs: In May 2013, the PPCR SC noted its concern over the low disbursement of PPCR funds and the slowdown in submission of projects and programmes for funding approval. The PPCR pipeline shows that 40% of the projects and programmes in the portfolio had received PPCR funding approval and were moving forward in a timely manner, while 60% were still in preparation prior to funding approval by the PPCR SC. However, 92% of these later projects and programmes have fallen behind, suggesting that a significant portion of the remaining projects and programmes in the PPCR pipeline are facing challenges in project preparation. (PPCR, 2013d).
    - For public-sector projects, reasons for the delays include challenges related to institutional and capacity barriers; procurement and unforeseen circumstances such as extreme climate events (floods; typhoons, e.g. Mozambique, Saint Lucia and Samoa); political instabilities (Grenada, Mozambique, Saint Lucia); changes in scope of or sector addressed by projects (Cambodia, Grenada); challenges in identifying appropriate private sector clients (Mozambique, Niger and Zambia); and MDB procedures (Grenada, Mozambique, Nepal, Samoa).
    - For private-sector projects, delays have been caused by limited access to finance; lack of appropriate policies and regulatory frameworks; low in-country technical capacities; lack of reliable data and information; limited appropriate infrastructure; and low level of awareness in the country on the role of the private sector in climate-resilient development.
    - Disbursement of the PPCR resources increased from US\$17.1 million at the end of December 2012 to US\$25.6 million at the end of June 2013, which is consistent with the projected disbursement paths. So, while the overall disbursement looks small compared to the pledged resources, the cumulative disbursement profile based on project documents and the actual disbursement rate are pretty much consistent (PPCR, 2013d).
  - Within the PPCR portfolio, the majority of PPCR resources have been allocated to public sector operations. Of the 62 projects and programmes in the PPCR portfolio, 52 (84%) are public-sector operations, while only 10 (16%) are private-sector operations. Therefore, identifying business opportunities and project sponsors in low-income countries (the focus of the PPCR) is taking longer than originally anticipated (PPCR, 2013c). This is related to the challenges of identifying adaptation projects, appropriate counterparts, and operating in unfavourable investment climates. In order to ameliorate this, a private-sector set-aside (US\$73 million in near-zero interest credits) was created to facilitate the development of innovative, breakthrough instruments and strategies to stimulate the development of private-sector projects and programmes in the PPCR pipeline (See <https://climateinvestmentfunds.org/cif/set-aside/ppcr>). As of 23 August 2013, PPCR had received 9 proposals competing for resources set-aside to enhance engagement in climate-resilient development (PPCR, 2013d).
    - Three-quarters of SPCRs have strong information sharing and lesson-learning elements, and the remaining one-quarter are rated as moderate. However, it does point to potential challenges in the choice of unit to coordinate the implementation of the SPCR; lack of clarity in some cases on an effective system for information exchange between levels or stakeholders or how to scale up lessons learnt about climate variability and adaptation at the local level. The evaluation also points to relatively high administrative and 'payment for project implementation service' costs, but acknowledges that using these indicators can be misleading.
    - Challenges and opportunities related to results monitoring and reporting in the PPCR: On-going adaptation planning, monitoring and evaluations is not a strong feature overall. In addition, the SPCRs generally do not widely promote the involvement of vulnerable communities or groups as actors in reducing vulnerability, or propose using community-based approaches to building adaptive capacity.
    - Debt sustainability: Concerns have been raised by both the PPCR SC as well as civil society organisations about the impact of PPCR credits on pilot countries' debt burden, the PPCR's alignment with the Debt Sustainability Framework (DSF), and the impact PPCR credits could have on the debt burden of countries that are in high debt distress. Despite the PPCR adopting a new regulation on debt sustainability, civil society groups maintained that loans for adaptation weaken the ability of states to deal with climate change (Bretton Woods Project, 2012).
- The PPCR has also been recognised as being quite controversial, in its establishment of a parallel framework for delivering adaptation finance to other UNFCCC funds such as the Special Climate Change Fund, Least Developed Countries Fund, and the Adaptation Fund (CFU, 2012).

### Risk and emergency preparedness in PPCR

The PPCR is primarily a climate-resilience fund, and does not specifically refer to emergency preparedness, but it does report that all endorsed SPCRs include investments that are natural hazard-related emergency preparedness activities related to strengthening climate data and hydromet services, either as stand-alone projects or as components of technical assistance or investment projects or programmes, and all MDBs are supporting one or more of these projects (PPCR, 2013d). The ICF evaluation also details that nearly half (9) of the 20 PPCR

projects approved by the PPCR SC as of 31 December 2012 (total value approximately US\$306 million) have a main focus or a sub-sectoral focus on disaster risk management (in relation to enhanced resilience to climate related natural hazards), representing about a third of total approved funding (ICF, 2013). Emergency preparedness-related activities for strengthening weather and climate forecasting, and expanding early warning systems, represent 50% of endorsed projects that are committee-approved (ICF, 2013). While many of the pilot countries are fragile states, programmatically it does not focus on conflict-related emergency preparedness, nor on man-made disasters (Andrea Kutter, CIF Administrative Unit, pers. comm., Aug. 2013).

### Evaluating emergency preparedness opportunities

The evaluations and reviews do not point to an expansion of the mechanism, but rather to the strength of its programmatic approach to 'transformational impact' and mainstreaming climate resilience into MDB operations (as opposed to the project focus of the Adaptation Fund, LDCF and SCCF) within specific pilot countries. Its focus is therefore on preparedness and resilience for climate change impacts (how climate-related changes in natural hazards are likely to affect a country's economy and population) in specific geographies, rather than specifically on emergency (disaster or conflict) preparedness. One exception is the case of Bangladesh, where coastal zone management is a major issue, and thus tsunami risk has also been included in the SCRP. But this is a very specific case of a non-climate related hazard integrated into the SPCR, but is not likely to be replicated or lead to any further thematic expansion (Andrea Kutter, CIF Administrative Unit, pers. comm., Aug. 2013). Furthermore, PPCR financed pilot programmes are intended to be aligned with National Adaptation Programmes of Action and other relevant country studies and strategies, and specifically should not be free-standing. This has direct implications for how any expansion into more emergency preparedness activities could be framed.

PPCR has stated that those pilot country governments and the regional organisations leading the Caribbean and Pacific regional programmes have shown a strong demand for additional PPCR learning activities focused on hydromet. The CIF Global Support Programme has therefore identified the theme of climate data and hydromet services as a CIF learning priority for fiscal year 2014 (PPCR, 2013d). Furthermore, an online module for hydromet and climate services is being developed (PPCR, 2013d).

Furthermore, the CIF is an interim financing mechanism (with its sun-setting reliant on the Green Climate Fund and its modality). The PPCR adopts the CIFs 'sunset clause' which enables the closure of funds once a new financial

architecture becomes effective under the UNFCCC regime (CIF, 2011c). It states that the SCF will take the necessary steps to conclude its operations only once a new financial architecture is effective (PPCR, 2013d)<sup>8</sup>. Within this context, the focus of the PPCR is to experiment with the deployment of scaled-up climate finance for addressing mitigation and adaptation issues, as well as experimenting with the concept of 'transformational change', and provide lessons learnt for other climate finance mechanisms (specifically the Green Climate Fund (GCF) to draw on. These requirements have meant that the PPCR only works with pilot countries, a geographic focus that is unlikely to change until the structure and modalities of the GCF are further clarified.

### Planned and possible expansion

In terms of emergency preparedness-related activities, PPCR focuses on identifying strategic interventions for risk reduction systems in the context of climate change-related increase in natural hazards. While the PPCR covers a number of the emergency preparedness categories, these are mainly in relation to climate-related hazards (floods and droughts, rather than a full range of natural hazards, that would also include earthquakes, tsunamis, etc.) and do not address emergency preparedness for man-made disasters or conflict. While, some of its some of its pilot countries are in post-conflict zones, many of the pilot countries are in fragile states (e.g. Mozambique and Haiti have suffered delays due to natural hazards or political instabilities) (PPCR, 2013d). Since the MDBs are the implementing entities of PPCR financing, it is their own policies and procedures that apply when working in fragile states conflict or post-conflict zones (PPCR, 2013c).

Instead, it is very much a climate-focused mechanism, prioritising investments in climate information and services (early warning systems, hydrological information services).

<sup>8</sup> I. SUNSET CLAUSE: (56). Recognizing that the establishment of the SCF is not to prejudice the ongoing UNFCCC deliberations regarding the future of the climate change regime, including its financial architecture, the SCF will take necessary steps to conclude its operations once a new financial architecture is effective. The Trustee will not enter into any new agreement with contributors for contributions to the SCF once the agreement providing for the new financial architecture is effective. The SCF Trust Fund Committee will decide the date on which it will cease making allocations from the outstanding balance of the SCF. (57). The Trustee will, in accordance with the Contribution Agreements, continue to administer the Trust Fund after the cessation of allocation by the Trust Fund Committee until such date specified in the Contribution Agreements, in order to receive the Trust Fund scheduled reflows of funds from outstanding SCF financing. Following the date so specified in the Contribution Agreement, the Trustee, on behalf of each contributor, will endeavor to transfer the contributor's share to another fund, which has a similar objective as the SCF as determined by the SCF Trust Fund Committee, or otherwise transfer or return the share to such other place, as agreed between the contributor and the Trustee under the Contribution Agreement. (58). Notwithstanding paragraph 56 above, if the outcome of the UNFCCC negotiations so indicates, the SCF Trust Fund Committee, with the consent of the Trustee, may take necessary steps to continue the operations of the SCF, with modifications as appropriate.

One of the exceptions to the focus on climate resilience is in countries such as Bangladesh, where the focus is on coastal zone management. In this case, investments in the early warning system included non-climate risks such as tsunamis. It is highly unlikely that the PPCR will expand to take on emergency preparedness activities related to non-climate hazards, pre- and post-conflict or specific categories concerning resource allocation and funding (beyond PPCR-supported tools), emergency preparedness training and exercises (beyond technical capacity building for monitoring, climate services and early warning), and emergency services arrangements (PPCR, 2013b; Andrea Kutter, CIF Administrative Unit, pers.comm., Aug. 2013). However, evaluations and consultation do point to the possibility of enhancing the PPCR's support of community preparedness, particularly the increased involvement of vulnerable communities or use of community-based approaches to building adaptive capacity (ICF, 2013; PPCR, 2013d).

### Pros and cons of emergency preparedness expansion

#### Pros

The PPCR is seen as relatively attractive to donors because of its integration into existing MDB policies and programmes, the transformational objective, and donors' ability to earmark contributions (WWF, 2011). The PPCR pushes a programmatic approach, with breadth of scope focusing on resilience to climate variability and climate change, investing time and resources for countries to go through a rigorous planning process to identify priorities (i.e. identifying the vulnerability priorities that need to be addressed) through a consultative process with government bodies, communities and the private sector. This allows it to prioritise needs for investment, identify the right partner, engender a strategic focus that cuts across siloes and sectors, and bring together the public and private sector.

Since the PPCR is the only fund that does not have a mandate to respond to the guidance of the UNFCCC, there is the ability for contributors to earmark contributions to a specific priority area (i.e. integrate climate resilience into development planning in a select group of pilot countries and regions). The PPCR was intended to disburse funds quickly, by utilising and building on existing MDB initiatives and avoiding prolonged negotiations in its design. It is also viewed as effective for strategically applying PPCR resources to leverage and scale up financing.

It has strength of coordination and governance.<sup>9</sup> Evaluations point to the strength of the government focal

<sup>9</sup> The SC is responsible for ensuring complementarity between activities foreseen for the PPCR and activities of other development partners active in the field of CCA, including the GEF and UN organisations, and ensuring effective cooperation between the PPCR and the GEF and UN country activities to maximize synergies and avoid overlap.

point agency in the PPCR, where seven pilot countries and regions have multiple focal points located in finance, economics and planning (15) and environmental ministries (12). Strong leadership in ministries responsible for finance and planning was important for mainstreaming PPCR-funded activities into national economic planning (CIF, 2009a, 2011a).

#### Cons

The PPCR is already broad, programmatic and integrative in its focus on climate resilience and therefore potential expansion beyond the core climate-related remit would potentially negatively dilute its strategic focus. This ability is also constricted by the requirement that it builds on NAPAs and be strategically aligned to other adaptation funds. Furthermore, the PPCR operates only in a select number of pilot countries, rather than spreading funding among all eligible countries. There are also concerns about the potential increase in debt burden due to the financing modalities of the PPCR as well as the recognised need for an update or proposed revision to the investment plan in order to address the delays and slow-down in submissions (PPCR, 2013d).

Evaluations point to weaknesses, including the lack of involvement of vulnerable communities or groups as actors in reducing vulnerability, lack of leveraged private-sector investment, lack of complete evidence of stakeholder consultation during the investment plan preparation (only two-thirds of PPCR missions and a quarter of the CTF joint missions have posted completion reports) (PPCR, 2013d; ICF, 2013). Finally, the longevity of the PPCR is unclear, as discussions have already begun on how to sunset the CIFs and transition to the new global climate finance mechanism, the Green Climate Fund (CFU, 2012).

### The challenges of expansion

**Management and advocacy.** The SC have not indicated any interest in expanding the scope of the PPCR beyond the already broad strategic focus of mainstreaming climate resilience and strategic alignment with the Adaptation Fund<sup>10</sup> (CIF, 2009b). Furthermore, there is a lack of certainty and clarity in the future of the PPCR, and CIFs in general (CIF, 2011c).

**Bureaucracy.** More time and consultation is expected to be required for PPCR due to the multi-sectoral and complex nature of its interventions (e.g. two of the PPCR regional plans took the longest of all the CIF investment

<sup>10</sup> The PPCR SC has never re-discussed the stated objective of the PPCR, namely: The PPCR funds technical assistance and investments to support countries' efforts to integrate climate risk and resilience into core development planning and implementation. It provides incentives for scaled-up action and initiates transformational change by catalyzing a shift from "business as usual" to broad-based strategies for achieving climate resilience at the country level (CIF, 2009b).

plans to reach endorsement [40 months to the fastest, which was endorsed within 7 months by the CTF]).

**Costs of debt burden.** Concerns have been raised by the PPCR Sub-Committee about the impact of PPCR credits on pilot countries' debt burden, the PPCR's alignment with the Debt Sustainability Framework (DSF), and that PPCR credits could increase the debt burden of countries that are in high debt distress (CIF, 2009b; PPCR, 2013d). The Sub-Committee emphasised that the PPCR should not add to the burden of highly indebted countries, and asked the MDBs to robustly apply their debt sustainability policies and tools to manage this risk.

### Step by step approach to expansion

There is limited scope to expand the PPCR into a more global mechanism for emergency preparedness. However, PPCR implementation is linked to implementation through MDBs. There is therefore scope to better coordinate and transfer knowledge with emergency preparedness/DRR-specific funds through the implementation team within the different MDBs. For example, closer linkages could be established with the Global Facility on Disaster Risk Reduction through the World Bank team, thus linking up the PPCR to other emergency preparedness/DRR projects of the Bank, in order to ensure that activities not eligible for PPCR financing still remain co-ordinated through a partnership approach. The PPCR is intent on building partnerships to address other issues indirectly related to climate adaptation and mitigation (e.g. collaboration through World Bank implementing partners with the Global Facility on Disaster Risk Reduction), but also determined that the PPCR resources remain focused and strictly linked to climate resilience (note comments earlier on earmarking).

In terms of expanding partnership, PPCR has already started to address this issue with the private sector set-aside, and through the implementing MDB and SPCR planning process (engaging with government ministries to identify both key vulnerabilities and key partners to enhance both national- and community-level capacity). In terms of expanding geographical and thematic focus, the PPCR SC (and its Expert Group) has core responsibility for identifying priorities and financing challenges. The SPCR plans are therefore key processes in which further aspects of emergency preparedness could be integrated, as requested by the PPCR SC and the implementing MDBs.

If more countries were to be added to the current list of pilot countries, then this would require the both the SCF Trust Fund Committees and PPCR SC to be involved in the decision-making process. However, such discussion is only likely to be tabled once the future of the PPCR becomes clearer (especially in the light of the sunset clause). In preparation for the next round of semi-annual meetings (end of October 2013), PPCR (as well as all the financing windows of the SCFs) were preparing proposals

for the process of selecting new pilot countries if more funds were committed. However, in terms of thematic focus, the SC is highly unlikely to expand the scope of the PPCR beyond the already broad strategic focus of mainstreaming climate resilience, especially as the SC has never re-discussed the objective of the PPCR<sup>11</sup>.

### Likely effect of expansion on case study countries

At present, Niger and Haiti are pilot countries, and there is no clear explanation for why the Philippines, Myanmar and Sudan are not currently prioritised by the PPCR. Possible extension to these countries would only be possible if there is further commitment to the CIFs once a new financial architecture becomes effective under the UNFCCC regime (CIF, 2011c). Since the PPCR SC is not closed to a geographic expansion if future funds are guaranteed, the further pilot countries could be proposed by the Expert Group of the PPCR SC.

The PPCR programme in Haiti, currently participating in the Caribbean regional programme, has experienced multiple challenges associated with the impacts of the 2010 earthquake, destruction stemming from recent hurricanes and low institutional capacities to deal with the complexity of the SPCR process. It has therefore taken significantly longer than expected to finalise the SPCR (PPCR, 2013d). As Haiti still needs to have their SPCR endorsed, there is scope to better integrate further activities (beyond risk identification and early warning) concerning emergency preparedness for climate-related natural hazards into the SPCR.

In Niger, the 'Project for the Improvement of Climate Forecasting Systems and Operationalization of Early Warning Systems (PDIPC)' is being financed to a total of US\$13.8 million (PPCR Grant, Loan and Government funds) (PPCR, 2010) to reduce the country's vulnerability to food shortages by improving rural livelihoods, supporting sustainable land management, strengthening weather and climate forecasting, and expanding early warning systems. However, at the time of writing, PPCR funding approval for Niger's projects and programmes had not been completed within 24 months of the SPCR's endorsement. PPCR acknowledges that the multi-sectoral nature of the pilot projects has led to lengthier periods of consultation and there have been challenges in identifying appropriate private-sector clients. PPCR's private-sector set-aside and increased focus on enhancing private-sector partnerships could go some way to ameliorating these delays.

<sup>11</sup> The PPCR funds technical assistance and investments to support country efforts to integrate climate risk and resilience into core development planning and implementation. It provides incentives for scaled-up action and initiates transformational change by catalysing a shift from "business as usual" to broad-based strategies for achieving climate resilience at the country level.

## Summary: key messages for decision-makers

There is a degree of uncertainty about the future of the PPCR, since the Green Climate Fund is currently poised to become the main channel for climate finance. This therefore raises questions in terms of positioning PPCR as a potential long-term solution to financing emergency preparedness (although specific lessons learnt from the use of PPCR funds for enhancing emergency preparedness could be transferred to the design and operation of the Green Climate Fund) beyond its core objective of funding technical assistance and investments to support countries' efforts to integrate climate risk and resilience into core development planning and implementation. Part of the PPCR's strength is its programmatic and integrating focus on climate resilience, such as many of the emergency preparedness activities already financed, but predominantly activities relating to early warning systems, hazard identification and information management systems. The PPCR could however ensure that emergency preparedness activities (even if only for climate-related natural hazards) are better

covered in the SPCRs related to preparedness response planning, national and regional risk pooling mechanisms for private sector and local communities, training and exercises for emergency preparedness simulations and drills, emergency services and standby arrangements. However, any expansion would need to be mindful of the requirements for strategic alignment with adaptation funds and activities, and ensuring that any loans for adaptation were in accordance with the principles on debt sustainability and would not weaken the ability of states to deal with climate change (Brettons Wood Project, 2012).

Nevertheless, the PPCR is currently unlikely to extend its focus either thematically beyond climate-related hazards or geographically beyond the pilot countries. Any attempt at reaching beyond its core mission is more likely to be achieved through building partnerships within the MDB framework to coordinate with investments on non-climate-related hazards (e.g. health, tsunamis or geological hazards) and better involve vulnerable communities, use community-based approaches, and leverage private-sector finance.

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# **Resource mobilisation advocacy strategies**

# Resource mobilisation advocacy strategy for the Philippines

Jan Kellett

## Introduction and background

Tackling disaster risk is central to the business of development in the Philippines<sup>1</sup>. It stretches from prevention and preparedness to growth and development and the achievement of the Millennium Development Goals (MDGs), and is a key element of national security. This undoubtedly has contributed to a highly risk-aware culture across both government and civil society and an environment where disaster risk is a shared political concern. There is considerable momentum across society for ensuring disaster risk remains central to the country's national consciousness, a momentum that is fuelled by a changing risk profile that has brought hazards to areas previously thought safe.

Over a period of nearly 40 years the Philippines, continually affected by both extensive and high-impact intensive disasters, has steadily evolved from disaster response, to disaster management, to disaster risk management (DRM) – and finally to reduction of risk. This has culminated in legislation – an act strengthening the DRM framework and the development of key institutions – which is often recommended as an example for other countries to follow. The international community has been a substantially important partner in this evolution, supporting a range of DRM related initiatives, and presently many of the strategies and frameworks for the international community's engagement in the Philippines include a focus on risk. This engagement has been (and still is) supported by a wide range of interventions from supporting the development of legislation through to training and response exercises at a local level.

Conflict adds complexity to preparedness in the Philippines, especially in Mindanao. Here the natural hazards of the Philippines meet the hazards of conflict, and the resulting forced movement of populations and necessary provision of a range of emergency requirements requires specific support outside of the government's DRM framework.

An additional complicating factor that all actors have to consider is the changing nature of disaster risk. Over the

last few years several areas of the country, largely in the South, have been hit with repeated seasonal typhoons, areas that have barely seen a typhoon in decades. Added to this is the threat of urban earthquakes, especially the increased risk posed by the rapidly expanding metro Manila area – memories of the devastating 1990 Luzon quake inform this concern.

## Overview of the resourcing environment and priorities to address

Any resource mobilisation for the Philippines needs to take into account not only the background of risk in the country, but also the current state of preparedness (financing and otherwise).

### Financing from national government

The Philippines has committed substantial volumes of money to risk. In the three years from 2009 to 2011 the government budgeted close to US\$2.4 billion for DRR, with the 2011 figure more than US\$350 million higher than the 2010 amount. In 2011, the volume spent on DRR reached 2.12% of the national budget.

Preparedness is not a huge proportion of this financing (just US\$107.4 million or 4.5% of the three year total) but it is an important part. The bulk of this funding has been spent on early warning and hazard/risk analysis.

### Financing from the international community

There is a mixed picture of humanitarian and development funding. Traditionally the Philippines has been a significant recipient of development, not humanitarian assistance. Humanitarian assistance has been just US\$322.9 million of US\$13.2 billion over a ten year period, and only in 2009 (the year of Typhoon Ketzana) did it get close to 10% of total aid.

The financing of emergency preparedness comes only marginally from financing mechanisms; the majority comes from bilateral funding. Climate adaptation financing exists but contributes little overall, remaining isolated from disaster-related spending. There is a small component from the private sector, though this is probably under-counted.

<sup>1</sup> Note that this document was prepared in the summer of 2013, before Cylone Haiyan, and therefore is unable to take into account the likely impact on engagement with preparedness, as well as its financing.

The Philippines has a rather narrow donor base. Of the DAC donor governments, five of these (United States, Japan, Australia, Germany and the EC) have accounted for 77.9% (US\$3.9 billion) of grant official development assistance (ODA) over the decade. The top 10 donors account for more than 93%. Financing for emergency preparedness over the last three years has come largely (more than 84.3%) from four different donors (United States, Australia, Japan, EC).

Financing is both varied and fragmented. Detailed analysis suggests that only 19 of the total of 35 projects tracked for emergency preparedness had this as their primary focus. In the Philippines emergency preparedness activities are undertaken as part of emergency response core funding, as part of a DRM programme, or as part of a long-term climate change adaptation-financing project.

Funding is considerably divided. Bilateral funding at a country level accounts for the bulk of emergency preparedness, 35% of it managed by humanitarian donors and 42% by development donors. Development funding goes to early warning and long-term technical infrastructure; whilst humanitarian funding goes to a wider range of projects, from community preparedness through to the very basics of stockpiling and is generally more focused on 'preparedness for response.'

### Non-financing concerns

Financing is by no means the only problem for emergency preparedness in the Philippines but some general issues could in part be addressed by, or incentivised through, better financing:

- Local level weakness: If there is a weakness in government work in preparedness it is at a local level, where the poorest of municipalities do not have the financial or human resources to undertake the work they are responsible for.
- Inadequate coordination systems: Coordination systems in the Philippines are not effective for articulating emergency preparedness. Development coordination hardly mentions the subject and humanitarian coordination attaches too much attention to 'crisis' rather than long-term national capacity.
- Lack of a clear plan of action: Although a DRM framework and plan exists there is no plan for emergency preparedness, especially that which should bring together a range of responses from international actors.
- Unclear roles and responsibilities for international actors: The international response to emergency preparedness is fragmented first into humanitarian/development mandates and then by varying unclear mandates, none of which are solely and clearly responsible for emergency preparedness.

## Proposed solutions: financing and advocacy

The financing for emergency preparedness has to respond to this complex environment, keeping an eye on the need for provision of response whilst continuing to build up the long term capacity of government and other national actors. It also has to ensure preparedness measures exist for both natural and man-made risks. A step-by-step approach is recommended that combines the addressing of fundamental issues with improved financing measures and the advocacy needed to secure that financing.

### Agreement on combined plans of action

Emergency preparedness in the Philippines can be significantly aided even without seeking additional funds. Building on the excellent work already done by the international community, a combined plan should be created that represents as many actors as possible; a plan that carefully articulates the roles and responsibilities of key actors. In the absence of clear guidance from the IASC, decisions should be made locally as to who does what.

Unlike complex emergencies, the international community is going to have more success by making this plan a longer term initiative that looks at the full range of DRM institutions and actors. This plan needs to be carefully aligned with the government's DRM framework, institutions and planning, and supportive of the capacity of these institutions. It will therefore go beyond the emergency preparedness activities articulated in this study. This will entail a different approach to preparing for conflict compared to more complex contexts, where more emphasis is likely to be placed on international actors and short-term preparedness measures. In the Philippines preparing for conflict should not be separated from the DRM work, however. Rather the same actors and activities involved in preparing for natural disasters must also stretch to cover conflict situations. In practice this is happening to an extent already.

### Donors need to align to the new priority for emergency preparedness

In the Philippines' context, work in emergency preparedness is much more of a development donor concern than in other contexts. There is serious work to be done to making emergency preparedness something that country based donors commit to, both in terms of engaging with the subject and providing funding. The Philippines Development Forum (or some equivalent long-term forum) should become the focus around which donors, agencies and governments can deliver on a long term DRM plan. Donors need to retain flexibility, however, with funding available to all preparedness needs.

Agreement should be reached on the manner of communication with donors, in particular what agencies are looking for what funding. The temptation to use bilateral relationships to finance projects outside of agreed upon roles and responsibilities, and a combined plan of action, should be resisted.

### Implementation of financing

Serious consideration should be given to creating a coalition looking at the range of DRM issues. The Philippines seems a perfect context to learn from Nepal's DRM consortium, with a combined plan of action across a range of actors. Given the substantial financing that appears available to the government it is highly likely that the weighting of funding from the international sector would be less than in the Nepal context. However, it could target those areas where the international system can best be used.

Financing in the Philippines should follow the plan of overall support to DRM, but retain flexibility to help actors dealing with preparing for conflict as well as natural hazards (especially relevant in Mindanao.)

### Potential new funding sources and partnerships

In the Philippines there is considerable potential to finance emergency preparedness beyond the system. The two most obvious sources are through remittances and the private sector.

Remittances play a massive part in the Philippines economy. In 2012 they were estimated to reach US\$24 billion, only behind India, China and Mexico in absolute terms, and much higher than those countries in per capita terms. This US\$24 billion represented on average 10% of the country's entire gross domestic product. Significant efforts should be expended on developing the existing UNDP development-centred remittance project into a risk management financing tool, especially one that is connected to preparing communities for hazards. This would likely have greater support from the diaspora.

The private sector in the Philippines already plays a significant part in disaster response and increasingly plays a role in broader development issues as well as longer term development work. There is significant potential to move beyond the early initiatives of the Philippines Business for Social Progress and the Philippine Disaster Recovery Foundation. There should be a series of public-private dialogues around the DRM framework and the government act on DRM. These should engage directly with all kinds of private sector organization, with perhaps the development of a platform (or better use of the existing

HFA platform) that can target the use of the private sector resources and funding for emergency preparedness activities. Public-private jointly funded and implemented projects should be high on the agenda.

### Supporting advocacy

The Philippines already has a relatively high profile for both natural and man-made risks; its regular cycles of natural disaster and punctuations of violence continue to keep it in the news. There is a need to utilise this profile for advocacy, harnessing it to ensure additional funding for preparedness comes from both the national system and international actors. A well developed, well articulated plan for disaster risk management, one that makes it clear what the role of the international sector is when compared to national government, could help increase support for emergency preparedness significantly. Advantage should be taken of the fact that the country is one of the pilots for the 'Political Champions for Resilience' to raise the visibility and profile of emergency preparedness. A combined visit by the Emergency Relief Coordinator and Administrator of UNDP, together with senior donor representatives within the champions group would likely help kickstart support from both national government and the international system for a substantial plan of action.

### Key messages for the Philippines

1. The Philippines is a success story. However, that does not mean that additional funds (and especially carefully targetted, aligned funds) are not required.
2. Support to the national DRM framework has to be central to any financing from the emergency preparedness financing.
3. A specific financing mechanism for the Philippines is not required, but the country would certainly benefit from a globally available pot of money for emergency preparedness.
4. Development funding is central to the future of emergency preparedness in the Philippines.
5. The resilience agenda should be used to boost the profile of risk management of all types.
6. The development of a consortium similar to the Nepal model should be actively considered.
7. The forging of partnerships within civil society for preparedness has potential (both for engagement and funding) but this cannot replace the necessary investments in risk-governance.

# Resource mobilisation advocacy strategy for Haiti

*Lilianne Fan and Steven Zyck*

## Introduction and background

Haiti is acknowledged as one of the countries with the highest exposure to multiple hazards, including tropical storms, flooding, landslides and earthquakes (CDEMA, no date; Klose and Webersik, 2010; World Bank, 2011), and as the country with the highest hurricane vulnerability rating in the Caribbean region. According to the World Bank's Hot Spot report 96% of the population is exposed to one or more natural hazards (GFDRR, 2010). The World Risk Report 2012 ranked Haiti as fifth out of 173 countries in terms of overall vulnerability to hazards, eighth for susceptibility and sixth in terms of the lowest adaptive capacity (World Alliance Development Works, 2012). Haiti's risk profile is due not only to its high exposure to natural hazards, but also to its high levels of poverty, which weaken social coping and adaptive capacities. Haiti is one of the world's poorest countries and the poorest in the western hemisphere, with an 78% of its population living below the national poverty line (World Bank, 2001).

Haiti has a long history of disasters that have had a devastating impact on lives and livelihoods. On 12 January 2010, an earthquake measuring 7.3 on the Richter scale struck Haiti, just 17 km southwest of the capital, Port-au-Prince. It was the most powerful earthquake to strike the country in 200 years and the most destructive urban disaster in recent history. The Government of Haiti (GoH) estimated that over 220,000 people were killed, more than 300,000 injured, and over 1.3 million left homeless (UN Office of the Special Envoy's website). The earthquake caused damage and losses of close to US\$8 billion, equivalent to 120% of the country's annual gross domestic product (GDP). The impact of the earthquake was further exacerbated by tropical storms and hurricanes as well as a cholera epidemic that began in October 2010 and continues today.

While a national framework for disaster risk management (Système National de Gestion des Risques et des Désastres, SNGRD<sup>1</sup>) was established in 2001, efforts to build institutional capacity, establish coordination and monitoring tools, and formulate long-term strategies have been consistently hampered by multiple shortcomings in governance combined with a lack of steady financing

for institutional development. In the immediate aftermath of the 2010 earthquake, the GoH articulated the urgent need to review the SNGRD, to strengthen the operational response and preparedness capacities, and to develop a legislative framework.

## Overview of the resourcing environment, and priorities

Resource mobilisation for preparedness in Haiti must support two interrelated transitions: moving from international to national leadership, and moving from a response-focused national structure to a preventative one.

## Financing from the national government

### National budget

The GoH's 2012–2013 budget allocated 327.5 million Haitian gourdes (HTG) (approximately US\$7.5 million) to disaster risk management, of which HTG 100 million (US\$2.3 million) is from the GoH's own resources and HTG 227.5 million (US\$5.3 million) is from external sources (GoH, 2012–2013). The major part of this funding is allocated to the Ministry of Interior and Territorial Collectives (MICT). In addition, the Ministry of Environment was allocated 135 million HTG (US\$3 million) for disaster risk reduction programmes, including flood-related risk reduction. In addition, the GoH made funds available from the public treasury for emergency response, which comes from a 1% income tax, which was introduced in 2012. This was used for the first time in the wake of Hurricane Sandy and Tropical Storm Isaac in late 2012, with the disbursement of HTG 5 billion (US\$120 million).

## Financing from the international community

### Total ODA

Between 2002 and 2011 Haiti received US\$9–10 billion in official development assistance, making it the 25th largest recipient of overseas development assistance (ODA) in this period. According to the Organisation for Economic Co-operation and Development (OECD), humanitarian aid as a proportion of total ODA to Haiti increased from 0.2% in 2002 to over 20% in 2008<sup>2</sup>.

<sup>1</sup> National Disaster Risk Management System

<sup>2</sup> <http://www.oecd.org/newsroom/aidtofragilestatesfocusonhaiti.htm>

### Primary donors

The United States, Canada and the European Commission have consistently been the primary donors – with the United States being the largest donor in seven of the last ten years. The Inter-American Development Bank (IDB) has been Haiti's largest source of multilateral development aid, providing approximately US\$650 million between 2002 and 2007.

### Impact of 2010 earthquake

The earthquake that struck Haiti in January 2010 changed the financing picture in several ways: ODA more than doubled from 2009 to 2010 and humanitarian assistance increased 20-fold to US\$3.1 billion. The balance of overall financial flows shifted overwhelmingly towards humanitarian assistance in 2010. In 2011 humanitarian financing provided nearly a third of ODA despite significant decreases in humanitarian funding. ODA in 2011 was the equivalent of 23.3% of Haiti's gross national income.

### Diversity of donors

While the major donors remained the same post-earthquake, the diversity of donors providing assistance to Haiti broadened after the earthquake. According to OCHA's Financial Tracking System (FTS), 108 countries provided humanitarian financing in 2010, though more than half provided donations of US\$1 million or less. The single largest source of funding for relief efforts in 2010 took the form of US\$1.3 billion in private donations (i.e. individuals and corporations). The earthquake also created new financing channels, most notably the Haiti Reconstruction Fund, which was established to finance government-led reconstruction.

### US and EU support

The humanitarian aid departments of the European Commission and the United States have both emphasised the importance of disaster risk reduction (DRR) within their approaches. In Haiti, Office of the United States Foreign Disaster Assistance (OFDA) assistance to DRR has mostly been in the form of programmes that integrate risk within disaster response, such as cholera prevention and reinforced shelters, as opposed to standalone DRR interventions (in 2011, US\$44 million of disaster assistance to Haiti integrated DRR; by contrast only US\$298,000 was for standalone DRR projects) (USAID, 2011). The Humanitarian Aid and Civil Protection Department of the European Commission (ECHO) provided €25.9 million for DRR projects between 1998 and 2013 (ECHO, 2013). ECHO's financing to DRR in Haiti represented 6.6% of its total funding in 2010 and 8% in 2011. In 2013, €3.5 million was to go to specific disaster preparedness projects. ECHO-funded DRR projects have included emergency preparedness, working in close collaboration with the National System of Disaster Risk Management and reinforcing government capacities to respond to emergencies (ECHO, 2013).

### GoH capacity building

Since the creation of the SNGRD in 1999, the GoH has been focusing on the gradual implementation of the national plan and the development of its disaster management institutions and capacities. The GoH's disaster management capacity has been supported by a handful of international partners, notably UNDP, the European Commission, the World Bank, the Inter-American Development Bank (IDB) and USAID. From 2005-2010 the IDB 5 million for a flood early warning system and US\$12 million from the World Bank between 2009 and 2012 for strengthening the SNGRD and to support the creation of a network of community preparedness committees. In January 2013, the United Kingdom pledged US\$15.4 million to build 'disaster resilience' in Haiti, including through supporting the private sector's involvement in disaster risk management and preparedness.

### Regional insurance

The CCRIF regional insurance mechanism disbursed more than US\$7 million to the GoH in the aftermath of the 2010 earthquake.

### Preparedness activities

Preparedness activities funded by the international community range from long-term interventions such as the development of early warning systems, the creation of hazard and risk maps, the creation of new emergency operations centres, the development of central and municipal-level response capacity, the secondment of staff and technical experts and disaster risk management (DRM) capacity assessments, and the development of contingency plans, to more response-focused activities such as simulation exercises, emergency stockpiling and public awareness for disaster preparedness and cholera prevention.

### Non-financing issues

#### Progress, but more institutionalisation needed

There has been significant progress in the Government of Haiti's ownership of the DRR and preparedness agenda, and DRM is increasingly articulated as a key development and humanitarian priority. The GoH's vision and leadership on this issue, however, need to be better institutionalised within the legal and bureaucratic system. At the national level, while the GoH inclusion of DRR and preparedness-related activities in the national budget is positive, these remain focused on year-by-year activities and are insufficiently connected to medium and long-term policy objectives. While there has been increasing support to the SNGRD, and recognition of the critical role that the Directorate of Civil Protection (DPC) in particular plays in response and preparedness, the latter still lacks legal status and therefore has no independent budget. At the same time, there is a need

to strengthen the institutionalisation of preparedness at sectoral levels.

### **Lack of coherent preparedness framework**

Recognition of the importance of preparedness is not yet mirrored in a clear articulation of a preparedness vision or a coherent funding plan. While national commitments to preparedness are becoming more consolidated, the general approach to funding preparedness is still fragmented across a multiplicity of projects and mechanisms. There is still no coherent conceptual framework among international agencies for the range of interventions being undertaken on preparedness, and little coherence among donors. Some donors of humanitarian assistance said that preparedness is a priority, but underlined the perceived lack of commitment and coherence at an agency level. At the same time, agencies have said that the funding available for preparedness is so limited, and that the donors of development aid remain reluctant to fund preparedness programming, even when it involves the long-term capacity building of national institutions. Beyond stockpiling relief items, warehouses, hardware and training, it is critical to invest in people, capacity and processes for the long term. It is also critical that preparedness is funded in a more streamlined manner, and that support is tracked progressively by the GoH's Committee of Aid Effectiveness (CAED) mechanism.

### **Sector preparedness**

Preparedness at sectoral levels remains weak in Haiti. Agriculture (The National Committee for Food Security [CNSA]) is a positive example, but appears to be somewhat unique. Problems cited included a lack of resources and capacity, although the CNSA has been effective in coordinating partners. There remains a lack of capacity to track funding against appeals. Many ministries do not even have emergency preparedness mechanisms to coordinate a sector-based response, and this needs to be supported more systematically.

### **Poverty and preparedness**

In the wake of recent disasters, poverty rates have risen in both urban and rural areas, and poverty is one of the major challenges affecting people's ability to both prepare for and recover from disasters. Current investment in livelihood preparedness, however, remains low.

### **National non-governmental partners**

While there has been more engagement with national institutions, there is still a need to engage more effectively with the private sector and civil society that are active in emergency preparedness. While there is a need for more support for GoH capacity, it is also necessary to engage other key partners. These partners must be central to the transition process as they are key to ensuring the sustainability, inclusiveness and accountability of

preparedness efforts. There are national platforms with well-defined structures and objectives, and they want more engagement, not just from the international community, but also from national stakeholders. The private sector wants clear memoranda of understanding (MoU) with the GoH to guide how capacity will be used and paid for.

### **Shock-proofing investments**

The private sector recognises preparedness as key to economic development and particularly the improvement of the investment climate in Haiti. Cash mechanisms, such as conditional cash transfers (CTTs), are being explored, which enable people to respond to their own priorities and support themselves. Both donors (such as the IDB) and the private sector (such as DIGICEL) are exploring such mechanisms. It is noted that Haiti is a privatised economy in which there is already much private activity (such as reconstruction through private financing) and that these networks and patterns need to be better understood and harnessed.

### **Accountability and public-private partnerships**

Representatives from the private sector and civil society stressed the need for more accountability of where preparedness funding goes and how effective it is, and to be more engaged in emergency preparedness activities. In particular, national actors articulated a need for more transparent oversight of the Ministry of Finance's Emergency Fund established through a mandatory 1% income tax. The fund was regarded as a potentially positive initiative, but in need of further clarity and accountability. Furthermore, the focus of the fund was on response, rather than more broadly on preparedness or DRR.

## **Proposed solutions: financing and advocacy**

Financing for emergency preparedness in Haiti must support the process of transition from international to national capacities. This must be based on a clear preparedness vision from the GoH and national actors. To realise this vision, additional resources should be sought from the national budget, development donors, and the private sector. The proposed resource mobilisation strategy is proposed below:

- **Support for the national preparedness vision and action plan:** International partners should support the GoH in developing a clear national vision of preparedness and an action plan that articulates national priorities, through a consultative process that engages a diverse range of Haitian actors, including the business sector and community-based organisations (CBOs). This will provide a framework for the

national actors and international partners to take stock of existing preparedness activities as well as levels and sources of funding, through the GoH's CAED, to identify gaps and conduct coordinated planning, implementation and monitoring and evaluation.

- **Adopt a medium-term expenditure framework (MTEF) for formulating forward-looking preparedness budgeting:** While the inclusion of DRR and preparedness-related activities in Haiti's budget is positive, these remain focused on year-by-year activities and are insufficiently connected to medium and long-term policy objectives. The introduction of MTEF budgeting, as part of broader budget reform and public financial management efforts, should be supported to enable the better linking of policy objectives to the allocation and expenditure of resources and stronger fiscal control of and accountability for preparedness, in line with the national vision and action plan. Off-budget donor funding for preparedness should correspond to GoH's priorities as articulated and calculated through the implementation of the MTEF for budget formulation.
- **The Political Champions for Disaster Resilience:** The high-profile Political Champions for Disaster Resilience, who visited Haiti in April 2013, can play an important role as global advocates for increased financing for emergency preparedness, and DRR more generally, taking the national vision and GoH's commitments to the international community. In addition to funding from their own respective governments and organisations (i.e., UK, World Bank, the UN Development Group [UNDG], UN OCHA,), the political champions should target development donors and the private sector to raise more funding for preparedness in Haiti.
- **Development financing:** There is a need to place preparedness more firmly on the development agenda. There is a growing recognition in Haiti that disaster preparedness is a critical part of building a stable foundation for sustainable development, whether in terms of food security, business continuity or environmental protection. There is also awareness that institutional development and the building of preparedness capacities requires long-term financing. Currently, however, preparedness activities continue to be financed largely through humanitarian funding. If preparedness is to be taken seriously as part of the national development agenda, within broader approaches to DRR and strengthening resilience, it will require greater financing from national and external development funds.
- **Realign, coordinate and maximise in-country pooled funding:** In-country pooled funds have been useful sources of financing for preparedness and DRR programmes. The *Emergency Relief Response Fund* (ERRF) is currently linked to the cluster system and priorities. In line with the cluster transition and the transfer of capabilities to national actors, the ERRF's priorities should also be gradually re-aligned to reflect the emergency preparedness priorities of Haitian actors, particularly the GoH, while maintaining an objective overview of humanitarian needs and continuing to fund international actors where gaps in national capacity remain. Similarly, the Haiti Reconstruction Fund has been an important source of funding for building the capacity of the DPC as well as broader DRR activities. The Haiti Reconstruction Fund is the largest source of flexible finance available for Haiti's recovery and reconstruction. US\$274 million has been allocated, and US\$104 million has yet to be allocated. As the Haiti Reconstruction Fund's mandate currently continues until 2017, it has the potential to remain an important mechanism for financing preparedness activities. Both the ERRF and Haiti Reconstruction Fund should be better coordinated to ensure complementarity in preparedness activities, and alignment to the GoH's priorities.
- **The private sector:** The Haitian private sector has shown itself to be an active, committed and innovative partner in emergency preparedness and should be more systematically engaged by the GoH and international agencies as a key partner on preparedness and DRR more generally. At the same time, the regional and international private sector is increasingly engaged in Haiti and can be mobilised more strategically as partners in preparedness. In support of such an approach, the International Finance Corporation (IFC), for example, could convene a series of public-private dialogues on DRM, including preparedness. Engagement should go beyond coordinating activities among different actors to focus on the development of a national public-private partnership (PPP) platform for preparedness. This would allow all parties to agree on a common set of priorities, on ways of working that complement and are mutually accountable, as well as possibilities to explore co-financing between the private and public sectors as well as international partners. The public and private sectors should also share expertise and build joint systems for monitoring results and ensuring accountability.
- **Livelihood preparedness:** Increased attention is needed on livelihood preparedness through measures that not only strengthen the ability for national institutions to respond, but that also increase access to timely support for people who are likely to be most affected by the impact of disasters and other emergencies. A range of tools, such as conditional cash transfers (CTTs) and index-based micro-insurance, should be further explored to enable people

to access financial resources more easily following disasters and to protect their assets. Both donors (such as the IDB) and the private sector (such as DIGICEL) are already exploring some of these mechanisms. Preparedness can be integrated into the development of these mechanisms including identifying vulnerable at-risk communities and training local communities on livelihood preparedness.

**Advocate for national financing:** The government is already setting aside 1% of income tax for emergency response. Actors in Haiti should advocate that parts of this (including all unspent portions) be allocated to risk reduction activities, especially preparedness.

### Key messages for Haiti

1. Haiti has seen significant progress on improving its emergency preparedness systems and capacities. However, the bulk of disaster-related funding is still response-focussed and additional emergency preparedness financing is needed.
2. Financing for emergency preparedness in Haiti must support the process of transition from international to national capacities. This must be based on a clear preparedness vision from the GoH and national actors. To realise this vision, additional resources should be sought from the national budget, development donors and the private sector.
3. The resilience agenda should be used to call for increased support for preparedness in Haiti. The Political Champions for Disaster Resilience can play an important role as global advocates for increased financing for emergency preparedness, and DRR more generally, taking the national vision and GoH's commitments to the international community, targeting development donors and the global private sector.
4. Support for the articulation of a national vision of DRR that includes preparedness is central for the emergence of a nationally-owned and coherent preparedness framework that can bring together national, international and regional stakeholders and resources, from both public and private sectors.
5. Additional financial and technical resources should be allocated in support of enhancing Haiti's capacity in policy-oriented budgeting and public financial management in disaster risk management, including preparedness.
6. DRR and emergency preparedness have been largely the domain of the public sector in Haiti. There is a need to engage more strategically and systematically with non-governmental actors, including the private sector and civil society. Preparedness partnerships between the public sector, the private sector and local communities should be explored, assessed and scaled up where feasible. Multi-stakeholder and PPP mechanisms should be established, learning lessons from existing models such as the Nepal Risk Reduction consortium.

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**Exploring risk, resilience and  
the economics of preparedness**

# Identifying finance for emergency preparedness

Neil Bird, Helen Tilley, Jan Kellett and Katie Peters

## Introduction

The implementation of policy depends on how related actions are resourced. And central to the resource question is the amount of finance that is made available as funding is essential for effective action. This is true of emergency preparedness as it is for securing policy goals in health and education. However, in comparison to the traditional social sectors, such as health and education, emergency preparedness is a new concept with a wide ranging meaning. This raises challenges for identifying and analysing expenditure on securing emergency preparedness.

For the purpose of this study emergency preparedness is defined as:

*“activities that aim to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards, natural and man-made”.* (Kellett and Harris, 2012)

Such a broad definition implies that relevant spending will be found across a range of sectors and different scales of operation within any one country.

A second challenge in understanding the funding of emergency preparedness is the complexity associated with the numerous funding sources, the many intermediaries who manage such funds, and the differing disbursement channels through which finance flows. Many international actors are involved, often applying differing approaches and interpretations of what constitute emergency preparedness actions. Identifying relevant spending may therefore require a phased approach, with varying levels of precision on funding estimates associated with different aspects of the emergency preparedness response in country.

A third challenge relates to the role emergency preparedness actions play in building resilience, reducing poverty and vulnerability. Many of the actions regarded as effective emergency preparedness contribute towards a broader agenda of vulnerability reduction, and help build the capacity of individuals and groups in ways that contribute to both emergency preparedness and development. Similarly, actions or initiatives aiming to reduce vulnerability, though not labelled as emergency

preparedness, may help bolster its effectiveness. Identifying the relative contribution that emergency preparedness actions make towards broader poverty reduction goals is complex and challenging but critical if the full impacts of emergency preparedness investments are to be realised.

## Categories of emergency preparedness that allow the identification of spending

The Overseas Development Institute (ODI) is undertaking in-depth case studies to assess the funding for emergency preparedness in Niger, Haiti, Myanmar, Sudan and the Philippines. In each case study the first activity will be to understand how the study's definition of emergency preparedness relates to the country being studied, and to ensure it is aligned to how emergency preparedness is understood in the country concerned. This is an important foundation for the subsequent financial analysis. It also has the potential to inform and enrich the international discussion on what constitutes emergency preparedness. For example, this may stimulate debate on how activities regarded as emergency preparedness are funded in specific country contexts.

A list of actions that require funding will then be developed, building on actions in Table 1. Emergency preparedness policy processes, programmes, projects and activities then need to be identified. Anything that will incur a cost to implement should be recorded. This list needs to be action orientated, but should also include all policy processes and coordination mechanisms that require funding. Identifying emergency preparedness actions by major sectors (e.g. water, health, agriculture) is a useful method to ensure that all relevant activities have been captured.

Identifying where and when demand for emergency preparedness actions originate should also be an early task. This will help guide where the subsequent analysis should focus, particularly the balance to be given between the analysis of national systems and international support. This is likely to vary between countries in recognition of different national contexts such as varying conditions of conflict and fragility and different hazard profiles.

**Table 1. Preparedness matrix: categories of emergency preparedness**

Categories	Activities
Hazard/risk analysis and early warning	<ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard/risk analysis</li> </ul>
Institutional and legislative frameworks	<ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>
Resource allocation and funding	<ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>• Government coordination mechanisms</li> <li>• National and sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster/sector established contextual standards</li> </ul>
Information management and communication	<ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster/sector information management systems – GIS, 3/4Ws<sup>1</sup></li> </ul>
Contingency/preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness</li> <li>• Contingency / Preparedness and Response Planning</li> </ul>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and / or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>
Emergency services/standby arrangements and prepositioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>

## International sources of funding for emergency preparedness

How emergency preparedness is articulated by international actors within each country should be analysed. Some of the key documents are likely to be United Nations development assistance frameworks (UNDAFs), World Bank country assistance strategies and consolidated appeals processes (CAP). Each of these may, in different ways, articulate a focus on risk. CAPs, where available, are likely to offer an early perspective on funding for emergency preparedness where it has been identified as a priority for humanitarian country teams. Other international sources for emergency preparedness funding are likely to be reconstruction and recovery plans, individual agency reports, and aid databases in use within countries.

Particular attention should be paid to identifying and mapping the use of international financing mechanisms for funding emergency preparedness, such as the UN Central Emergency Response Fund, the Global Facility

for Disaster Reduction and Recovery, the Thematic Trust Fund for Crisis Prevention and Recovery, and, for a number of countries, the common humanitarian funds and emergency response funds. Much of this information is available over the internet but will need to be supplemented by interviews with key actors on the ground.

The level of funding over a 3-4 year period should then be determined for each source and summarised, both in terms of budget estimates and actual expenditure (where possible). Year-on-year variation, as well as deviation between budget and expenditure by source, should be highlighted and explained. In some cases, information provided by donors may be validated with that from government sources.

The main modalities used by international funds (e.g. project funding outside government systems and programme and project funding through government

<sup>1</sup> The 4 Ws are who, what, where, when.

agencies) should be listed, and funding through each modality recorded where available. It is important to understand how international funding is captured in national systems.

For each fund the following questions should be asked:

- Are country systems used for procurement?
- Are there project implementation units?
- Is donor funding captured in the government budget that is approved by parliament?
- Is the funding disbursed through the national treasury?
- How reliable is donor funding?

The answers to these questions will help identify the strengths and weaknesses of both government systems and the management of international funds.

In addition, where multiple international funds are operating at the same time, an analysis should be made of the level of complementarity achieved and whether there are effective coordination mechanisms in place, such as a joint donor-government group that meets regularly.

## Domestic sources of funding for emergency preparedness

There is often a significant difference between how domestic funding is structured, governed, and delivered compared to international funding. A preliminary analysis of the linkages between emergency preparedness and national policy (e.g. national development plans) and expenditure (e.g. medium term expenditure frameworks (MTEF), and annual budgets) needs to be completed. This will provide an indication of the national prioritisation of emergency preparedness in terms of policy and expenditure. This analysis should be completed through a review of the relevant national planning documents supplemented by key informant interviews.

Domestic funding modalities for emergency preparedness also need to be described. The two main channels are national budgets and extra-budgetary funds. There may be one or more national emergency response funds, supported by national legislation, which should be examined. In addition, national budgets may have an emergency fund that emergency preparedness activities can draw on (this may be a component of the contingency fund).

The governance of expenditure should be analysed (e.g. the roles played by ministries of finance, planning, and emergency preparedness units within sector ministries); and also the relationship between national and sub-national agencies. There is often a central administrative unit responsible for national crisis management and its location within government should be documented

as this often reveals national policy priorities. Whether it resides within central government, such as in the prime minister's office, or is positioned in a line ministry, e.g. the environment ministry, or as a government agency, is likely to influence funding allocations.

In addition to the earlier review of any coordination mechanisms that exist between national and international agencies, national emergency preparedness coordination structures (and their supporting secretariats) should have a financial 'footprint' that can be traced and analysed. Such coordination can involve a large number of disparate parts of the government administration (e.g. ministries of home affairs, defence, health) raising the obvious challenge to securing an effective emergency preparedness response.

## Identifying sectors where emergency preparedness actions are implemented

The next step is to identify the main sectors within which emergency preparedness actions take place. What are the government ministries where emergency preparedness funding will be found? This will likely include ministries of home affairs, health, education, local government, water, and defence. Sector development plans should be reviewed to see what references are made to emergency preparedness that would be expected to lead to expenditure commitments. If there is a national MTEF in place, each sector's MTEF should be reviewed to identify funding commitments (both current and future) to emergency preparedness.

The analysis should aim to extract multi-year budget estimates and actual expenditure for identified emergency preparedness actions within each sector. This can be done by reviewing the national budget documentation over several years to build a trend analysis. The analysis should also include the financing modality used for each emergency preparedness option (and so should include any relevant extra-budgetary funds). Information in national budgets and expenditure databases will typically only capture 'on-budget' information, so relevant spending through any extra-budgetary funds will have to be obtained from the respective fund secretariats. For development budgets, emergency preparedness spending should be identified from the relevant budget line (or project). For recurrent budgets, the process is more difficult and the scope for identifying expenditure will depend on the level of disaggregation of the budget information. How emergency preparedness is managed at the sector level (e.g. within disaster units) will have important implications for funding. If recognisable institutional structures are in place they will likely have a

separate programme code within the national budget that can be identified.

Potentially this is a considerable area for analysis. One possible approach to limit its scope is to carry out the expenditure analysis for a small number of key sectors where emergency preparedness is expected to be focussed.

## Challenges for identifying emergency preparedness expenditure

There is likely to be uncertainty over where emergency preparedness stops and other spending starts, so some consensus needs to be reached over what is included as emergency preparedness. The study team in each country will need to make a first approximation of where this boundary, between emergency preparedness and other spending, lies.

Determining the contribution of emergency preparedness funding from multiple funding streams is another likely challenge. This may arise where emergency preparedness is a component of a larger programme, as well as where multiple funders contribute to one programme. In such circumstances, an estimate of the proportion of spending directed towards emergency preparedness has to be made. A similar challenge is involved in determining the country component of regional programmes.

Where international actors play a large role in delivering emergency preparedness, the complexity of financing is likely to be significant. Examples of this include how the same agency (often a UN entity) can act as a donor, a recipient and also an implementer of emergency preparedness activities in the same country. As a result, investments in emergency preparedness may appear in the accounts and programming of up to three different organisations, but can actually be a single disbursement.

Differentiating between within-year and multi-year activities also has funding implications. For multi-year activities, it is important to be aware of the risk of double counting. Finally, multi-year analysis presents a particular definitional challenge as both international agencies and government ministries often re-classify expenditures, particularly in response to pressures to demonstrate action under specific labels, be it emergency preparedness, climate change or resilience building. This all points to the need to take considerable care in identifying emergency preparedness finance, even at this first, exploratory stage.

## References

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# Scoping the potential of cost–benefit analysis in assessing disaster emergency preparedness

*Reinhard Mechler*

## Executive summary

### Background

Decision makers and donors are increasingly becoming interested in the 'business case' for investing in disaster risk management. There is a small, but growing field of studies that uses cost–benefit analysis (CBA) as a tool for comparing the costs and benefits of interventions in order to make this case. However, emergency preparedness, as one critical element of disaster risk management that contributes to reducing risk during emergency events by modifying socioeconomic vulnerability, has not been studied specifically in this regard. This paper examines the economic efficiency and the associated costs and benefits of investing in ex-ante emergency preparedness. Emergency preparedness is defined as strengthening local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards. This paper provides guidance on robustly assessing the economic efficiency of disaster risk management (DRM) and preparedness as well as using such information in advocacy and implementation.

### The business case can be made for disaster risk management

The analysis shows that the economic case for DRM across a range of hazards is strong and that the benefits of investing in DRM outweigh the costs of doing so, on average, by about four times the cost in terms of avoided and reduced losses. Also, the assessment demonstrates that there is little, but growing documented evidence on the efficiency and benefits of preventive measures, and little probabilistic analysis based on 'true' estimates of risk. Most interventions considered in those studies cover structural measures, most prominently flood risk prevention and seismic retrofitting.

### The business case can also be made for preparedness

Yet, preparedness has increasingly been tackled and 10 of the 30 studies reviewed had a preparedness component, nine of which cover emergency/response

preparedness in terms of considering the returns to land use and evacuation planning, training and capacity building, early warning, shelters and the provision of emergency kits. Also, three of the studies cover systemic preparedness interventions such as the establishment of women's self-help groups and enhanced access to markets. The cases cover many exposed regions in Africa, Asia, Oceania, the Americas and Europe and options in the cases were generally implemented or assessed in combination. Seven of the studies were ex-post evaluations, and three ex-ante appraisals. Overall, the preparedness studies seem to indicate substantial net benefits across different evaluations, hazards and locations. While some interventions exhibited benefit/cost (B/C) ratios of less than 1 (i.e. interventions that were not cost-efficient), many times these ratios were positive, and an upper value of 4 for the best estimates per study seems a reasonable number for this set of studies. The variation was high, and preparedness benefits were found to often even outweigh benefits from flood control and exposure modification with ranges of B/C ratio estimates from early warning of up to 70 and preparedness (in terms of planning and enhancing resilience) of up to 24. There are, however, questions regarding the robustness of these numerical estimates.

### Robustness of results is an issue

The available evidence is limited and is based on medium agreement across the studies, which could be summarized overall as a low level of confidence. There are many important caveats to consider, of which the following two appear important:

- Risk was not always properly considered in the studies in terms of the recurrence of events, which may lead to overestimating the benefits of interventions; and
- many gaps and omissions existed in terms of not counting intangible and indirect effects, which will lead to an underestimation bias.

In theory, and as demonstrated here, also in practice, some of these challenges and problems can be solved to render results more robust as analyses increasingly take a risk-based route, and often indirect effects are also considered. Yet, the challenges associated with

intangible benefits seem difficult to surmount and unlikely to go away. These challenges are particularly pronounced for disaster preparedness, which is oriented towards modifying socioeconomic vulnerability and consequently many benefits produced are intangible, such as reductions in loss of life, in adverse health effects, in loss of well-being and in impacts on natural resources. At the same time, interlinked and crosscutting projects that build resilience (in particular those that are traditionally regarded as 'software') are at the heart of preparedness-based interventions, yet do not easily render themselves to rigorous cost and benefit accounting.

### Going forward with CBA and going beyond

CBA will continue to appeal to decision-makers and practitioners due to its intuitive ease. Many analysts see its main strength in it being an explicit and rigorous accounting tool for measuring those costs and benefits, gains and losses, that can be effectively monetised, and in so doing, help make decisions more transparent. We suggest that if CBA is to be robustly applied to preparedness, then analyses must ensure that appropriate weight is given to the benefits associated with direct and indirect benefits, both of which are measurable (though with varying degrees of certainty).

Care should be exercised when interpreting and using CBA results for informing decisions. The challenges and advantages of CBA are well known to decision makers, yet field practitioners working on DRM may be less well versed in the nuances of the costs and benefits of DRM as well as ways of interjecting results into decision-making processes. Identifying and explaining the robustness of results is a key imperative to identify omissions and gaps in estimating the benefits and results should generally be shown in terms of ranges.

On the other hand, the fact that CBA has not often been used to prioritise the implementation of options and the fact that there are important technical challenges related to conducting full blown analyses – particularly in data poor environments – may well mean that the effectiveness of using CBA to inform decision making may be more related to process than outcome. This would mean that CBA is most useful as a heuristic decision support or advocacy tool to help practitioners and policymakers to categorise, organize, assess, and present information on the various costs and benefits of specific projects, policies and strategies, rather than giving definite answers for prioritising options to reduce, prepare for and financing disaster risk. More fundamentally, other decision support tools are well worth investigating for evaluating preparedness in order to go beyond monetising and aggregating costs and benefits where such a focus is not appropriate.

## Introduction

Disaster practitioners and analysts emphasize the need for more of a focus on pre-disaster risk management than the post-disaster provision of relief and reconstruction assistance. Yet, there is still a serious bias toward relying on ex-post (after the event) rather than ex-ante (predictive) approaches. A major reason for this is the limited information available on the benefits of prevention, as suggested by the following quotation:

*"In the absence of concrete information on net economic and social benefits, and faced with limited budgetary resources, many policy makers have been reluctant to commit significant funds to risk reduction, though they have continued pumping considerable funds into high-profile, post disaster response."*  
(Benson and Twigg, 2004)

Cost-benefit analysis (CBA) is one tool that can provide quantitative information about the prioritisation of disaster risk management (DRM) based on economic efficiency. Applying CBA to DRM is nothing new and the economic efficiency of disaster risk management has been an important concern for many policymakers including donors, NGOs and international financial institutions while investing in DRM in developing countries. CBA has been applied to the assessment of disaster risk management; yet, in contrast to the rhetoric regarding the potentially large benefits of DRM, sparsely so and with remaining deficiencies. In addition to the general case for DRM, decision makers and donors working at different governance scales have lately become increasingly interested in the 'business case' for investing in ex ante preparedness. There is a small, but growing field of studies that provide insight into this matter, so reflection as to the state of the art is timely. This paper examines the business case and the associated costs and benefits of investing in ex-ante preparedness in order to build disaster resilience. It provides guidance on assessing the cost-efficiency of DRM and preparedness as well as on using such information for advocacy and implementation. The paper finally reflects on the potential and usefulness of CBA for this problem domain and suggests alternative tools for supporting decision-making. It also provides recommendations as to conducting CBA within the ODI project in light of the tracking of financial flows, which forms the backbone of the project overall.

The paper is organized as follows. First the methodological background on CBA and its advantages and limitations for assessing disaster risk management are given. The following section presents key challenges for assessing costs and benefits of DRM, before the evidence found in the literature on preparedness is presented in next section. Alternative methods for decision-making using

costs and benefits of DRM are then given. And the final section provides insights gained from the study process and recommendations.

## Methodological background

### CBA as an appraisal and evaluation decision support tool

CBA is a major decision support tool used by governments to organize and calculate the societal costs and benefits, inherent trade-offs and economic efficiency of projects, public policy and programmes (Brent, 1998). Following HMT (2007), CBA can be described as an:

*“Analysis which quantifies in monetary terms as many of the costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value.”*

In CBAs, the costs and benefits of public interventions are compared under a common economic efficiency criterion. For this purpose, all effects need to be monetized and aggregated. CBA has been widely used for this purpose (see, e.g., Dasgupta and Pearce, 1978; World Bank, 2010). The stages where CBA plays a role are marked in bold in Table 1. Of key importance are project appraisal (assessment before implementation) and evaluation (assessment after implementation).

**Table 1. Stages of project cycle and uses of CBA (in bold)**

1. Programming
2. Project identification and specification
<b>3. Appraisal: technical, environmental and economic viability</b>
4. Financing
<b>5. Implementation</b>
6. Evaluation

Source: Based on Benson and Twigg (2004).

Projects such as investments into infrastructure and risk management are rooted in the context of general programming, i.e. setting principles and priorities for public investments and development cooperation. Here, CBA can have an impact, e.g. by generally outlining the benefits of disaster prevention. The actual project planning starts with project identification and specification (the pre-project appraisal stage), where CBA can help to select potential projects. This leads to the following appraisal stage where project feasibility from different perspectives is checked. Alternative versions of a project will then be assessed under criteria of social, environmental and economic viability. In a fourth stage, the financing dimension of the projects will be determined which is followed by the actual implementation. Finally, projects need to be evaluated after completion in order to determine actual benefits and whether the implemented projects met expectations. In addition to informing the project cycle, and important for this study, analyses may also be conducted for informational and advocacy purposes (Brent, 1998).

Purposes, and the resources, time commitments and expertise required differ significantly for these products. Requests for information will differ between cases involving a development bank and a municipality, between small-scale and large-scale investments, and between planning physical infrastructure and capacity building measures. At the very early stage, it is critical to achieve consensus among interested and involved parties regarding the scope and breadth of the CBA to be undertaken. Table 2 provides a quick overview of a number of different types of CBA, their purpose, and resource and time commitments.

The key common features of CBA are collated in Box 1.

The following three decision criteria are of major importance:

- *Net present value (NPV)*: Costs and benefits arising over time are discounted and the difference taken, which is the net discounted benefit in a given year. The sum of the net benefits is the NPV. A fixed discount rate is used to represent the opportunity costs of using public funds for the given project. If the NPV is positive

**Table 2. Level of complexity for different types of CBA**

Product	Purpose	Resource and time commitment
Project appraisals	The evaluation of projects, often involving singling out the most effective measure from among alternatives	+++
Evaluations	Ex-post evaluations of projects	++
Informational studies	To provide an overview of costs and benefits	+

**Box 1.****Key features of CBA**

- **Emphasis on monetary outcomes:** All information needs to be put into monetary dimensions. Only those costs and benefits that can be quantified should enter analyses and results. Techniques exist to price intangibles and non-market effects, yet where there are no monetisable data (which is often the case), positive or adverse outcomes cannot be considered resulting in biased outcomes.
- **Selection of the best option among alternatives:** CBA is often used to single out the best option among a set of measures rather than calculating the desirability of implementing a project or option.
- **Baseline vs. counterfactual:** CBA compares the situation with and without the project or investment, not the situation before and after the occurrence of an intervention.
- **Societal point of view:** CBA takes a societal welfare approach. The benefits to society have to outweigh the costs in order to make a project desirable. The question addressed is whether a specific project or option adds value to all of society, with the balance between winners and losers usually unaccounted for.
- **Revealed versus expressed preferences:** In the *revealed preference* approach, market prices for the goods under scrutiny (such as the value of material used for reconstructing a building after a disaster) can be observed and used. However, often, prices cannot be directly observed (e.g., a general value for 'protection' against natural disasters), and the *expressed preference* approach is used, where preferences are gathered through surveys.

(i.e. benefits exceed costs), then a project is considered desirable.

- **The benefit cost (B/C) ratio** is a variant of the NPV: The benefits are divided by the costs. If the ratio is larger than 1, i.e. benefits exceed costs, then a project will add value to society. The BC ratio is often used.
- **Economic rate of return (ERR):** Whereas the former two criteria use a fixed discount rate, this criterion calculates an interest rate that represents the return of the given project. A project is rated desirable if this ERR surpasses the average return on public capital.

These criteria offer different messages for different applications. For example, project practitioners and those interested in advocacy seem to prefer the B/C ratio approach, while the UK government uses the NPV rule, and the World Bank prefers ERR. In most circumstances, the three methods are equivalent. The B/C ratio offers intuitive appeal due to its relative metric (benefits per

costs), and has been used most frequently in the context of DRM. We follow this tradition in this paper.

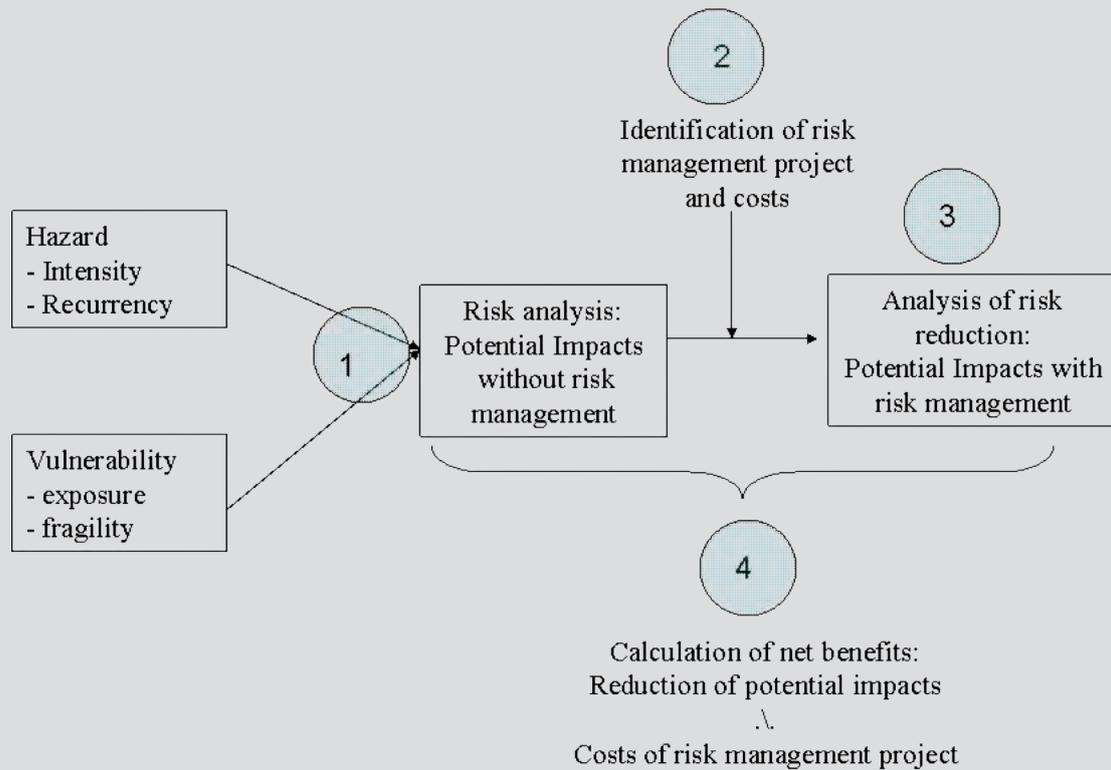
**CBA and DRM**

CBA has been applied to assessing disaster risk management and there is a literature, including manuals, on using CBA and other appraisal methods in the context of natural disaster risk (see Benson and Twigg 2004). In the United States, CBA of flood control projects was mandated by Congress under the 1936 Flood Control Act and has been used for evaluating risk reduction projects since the 1950s. It has, in effect, been standard practice for more than half a century for organizations such as the US Federal Emergency Management Agency (FEMA) and the United States Army Corps of Engineers. To many US (government) decision makers economic efficiency has been a very important aspect when devising disaster-related policies. In the United States, for example, cost-benefit considerations have "at times dominated the policy debate on natural hazards," although it remains unclear to what extent decisions have been rigorously based on CBA results (Burby, 1991). The UK Government's Department for Environment, Food and Rural Affairs (DEFRA) and the World Bank also generally advocate the use of CBA for projects and policies including those related to disaster risk management (see, e.g., Ministry of Agriculture, 2001; Penning-Rowsell et al., 1992). Lately, the development cooperation context has moved to the forefront due to interest by international financial institutions, donors and INGOs to gauge the economic efficiency of their interventions.

CBA can be used to inform the project appraisal stage and select the most suitable options among alternatives; although it is of importance for the other phases of the project cycle, specifically for identifying projects and preselecting potential projects and rejecting others. Also, in the evaluation phase, CBA is regularly used for assessing ex-post if a project really has added value to society (Brent, 1998). The following steps to be followed can be identified for doing CBAs in this specific field of application (see Mechler, 2005)

- **Risk analysis:** Risk in terms of potential impacts without risk management has to be estimated. This entails estimating and combining hazard(s), and vulnerability (exposure and fragility).
- **Identifying risk management measures and associated costs:** Potential risk management projects and alternatives can be identified and the costs measured.
- **Analysis of risk reduction:** In DRM benefits arise due to the savings in terms of avoided and reduced direct, indirect social, economic and environmental impacts.
- **Calculation of economic efficiency:** Finally, economic efficiency is assessed by comparing benefits and costs.

Figure 1. Steps for conducting a CBA of DRM



Source: Mechler (2005).

The types of interventions to be studied by CBA can commonly be broken down into risk prevention, preparedness and risk financing measures that can be taken in order to reduce or finance risk before during and after events. Table 3 lists key characteristics and examples of these types of measures.

These three types of measures have different effects: Prevention reduces risk *before* events by modifying hazard, exposure and physical vulnerability. Preparedness, the focus of this paper, reduces risk *during* events by modifying socioeconomic vulnerability in terms of the response to disaster. Two kinds of preparedness may

Table 3. Elements of DRM and their characteristics

Type	Prevention	Preparedness	Risk financing
Effect	Reduces risk before events by modifying hazard, exposure and physical vulnerability	Reduces risk during events by modifying socioeconomic vulnerability	Reduces risk (variability of losses) by modifying socioeconomic vulnerability
Key options	Physical and structural mitigation works (e.g. irrigation, embankments) Building codes, regulation Purchase of houses and zoning	Land use and evacuation planning, training and capacity building Institutional and legislative frameworks, resource allocation and funding mechanisms National plans of action, national platform, national disaster management authority Inter-agency coordination Civil protection, emergency services, search and rescue Simulations, drills Early warning, shelters Emergency kits Systemic interventions	Risk transfer (by means of (re-) insurance) for public infrastructure and private assets, micro-insurance Alternative risk transfer National and local reserve funds

be distinguished: (i) preparedness activities that build preparedness and resilience more broadly by way of non-targeted and systemic interventions into education, health or infrastructure. And (ii) emergency or response preparedness that encourages response and reduces risks during an emergency). The latter set of measures is fundamental for this paper, and is defined as follows for the project overall:

*“The aim of emergency preparedness is to strengthen local, national and global capacity to minimise loss of life and livelihoods, to ensure effective response, to enable rapid recovery and increase resilience to all hazards.”*

The measures that can be undertaken are listed in Table 3 (see also IASC, 2012). Risk financing also modifies socio-economic vulnerability, but modifies risk only in terms of cutting out the variability of losses (statistically speaking the variance), not reducing risk overall (the expectation).

Key information on risk management measures required for quantitative cost–benefit analysis includes:

- the exact type of the option under consideration
- its planned lifetime
- the costs such as investment costs and maintenance costs
- planned funding sources
- possibly additional benefits and impacts.

Costs can normally be determined in a straightforward manner as market prices will be available for items such as labour, material and other inputs. Some uncertainty in these estimates usually remains as prices for inputs and labour may fluctuate. Often, project appraisal documents allow for potential fluctuations by varying cost estimates by a certain percentage when appraising costs.

## Challenges

While CBA can play a critical role in supporting decisions, its use and applicability are also constrained by equally important limitations. There are challenges, which are DRM-specific as well as inherent to CBA. DRM specific ones are (i) representing disaster risk, (ii) assessing intangibles and indirect benefits from disaster risk reduction investments, (iii) the role of portfolios of systemic interventions versus single interventions, and (iv) data challenges. We also discuss a number of general challenges inherent to CBA. We now take a closer look at these challenges while for the review, we will build on the DRM specific challenges.

### Representing disaster risk

Disasters are low probability-high impacts events, and follow extreme event distributions characterized by ‘fat

tails’ (see Hochrainer, 2006). Ideally, such risk requires probabilistic analysis to adequately represent the potential for impacts as well as the benefits in terms of reduced impacts.

### Measuring risk

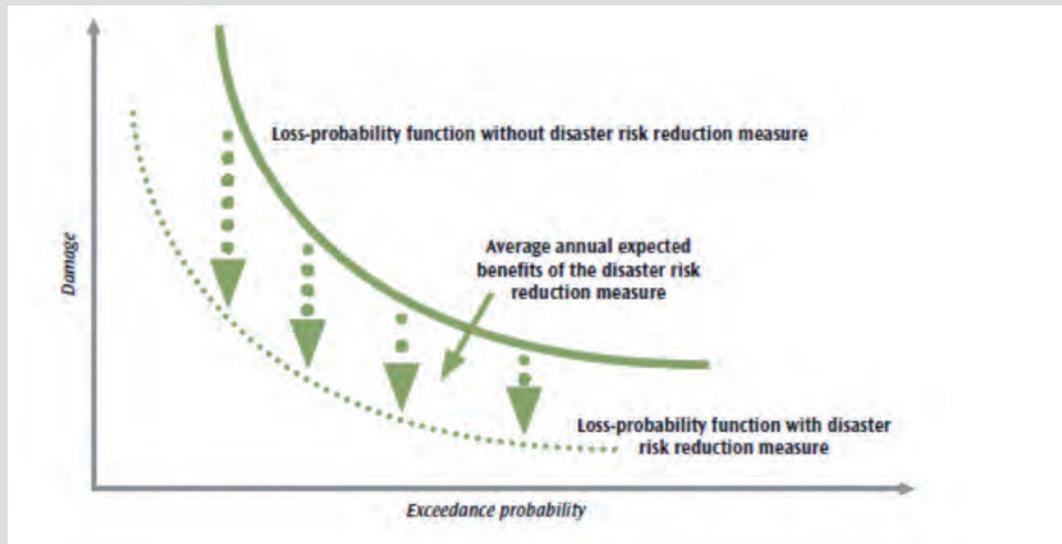
A standard statistical concept for the probabilistic representation of natural disasters is the *loss-frequency function*, which indicates the probability of an event not exceeding (*exceedance probability*) a certain level of losses. The inverse of the exceedance probability is the *recurrency period*, i.e. an event with a recurrency of 100 years on average will occur only every 100 years. It has to be kept in mind that this is a standard statistical concept to calculate events and their consequences in a probabilistic manner. A 100 year event could also occur twice or three times in a century, the probability of such occurrences however being very low. In order to avoid misinterpretation, the exceedance probability is often a better concept than the recurrency period. Based on such a representation of risk, the benefits of DRM can be assessed in terms of shifting the curve, and a downward shift would entail a reduction in potential impacts, thus producing benefits, which is shown in stylized fashion in Figure 2.

### Relevance of risk

Next we turn to the study of the effects and benefits of reducing risk, using a risk-based/probabilistic framework. We illustrate this as follows in terms of the costs and benefits of risk management projects. Costs, which can be divided up into investment and maintenance costs are deterministic, i.e. they arise and often incurred early on. Benefits, arising due to the savings in terms of avoided direct and indirect losses are probabilistic and arise only in the case of events occurring.

What is more, DRM options relate to risk as well, and are effective for certain so called ‘layers of risk.’ In general, for the low to medium loss risk layers, where events happen relatively frequently, prevention is likely more economically efficient in reducing burdens than insurance. The reason is that the costs of prevention often increase disproportionately with the severity of the consequences. Moreover, individuals and governments are generally better able to finance lower consequence events (disasters) from their own means, for instance, savings or calamity reserve funds. The opposite is generally the case for costly risk-financing instruments, including insurance, catastrophe bonds and contingent credit arrangements. Catastrophe insurance premiums fluctuate widely and are often substantially higher than the pure risk premium (average expected loss), mainly because the insurer’s cost of back-up capital is reflected in the premium. For this reason, it may be advisable to use those instruments mainly for lower probability hazards that have debilitating

**Figure 2. Benefits of DRM in terms of shifting the risk distribution**

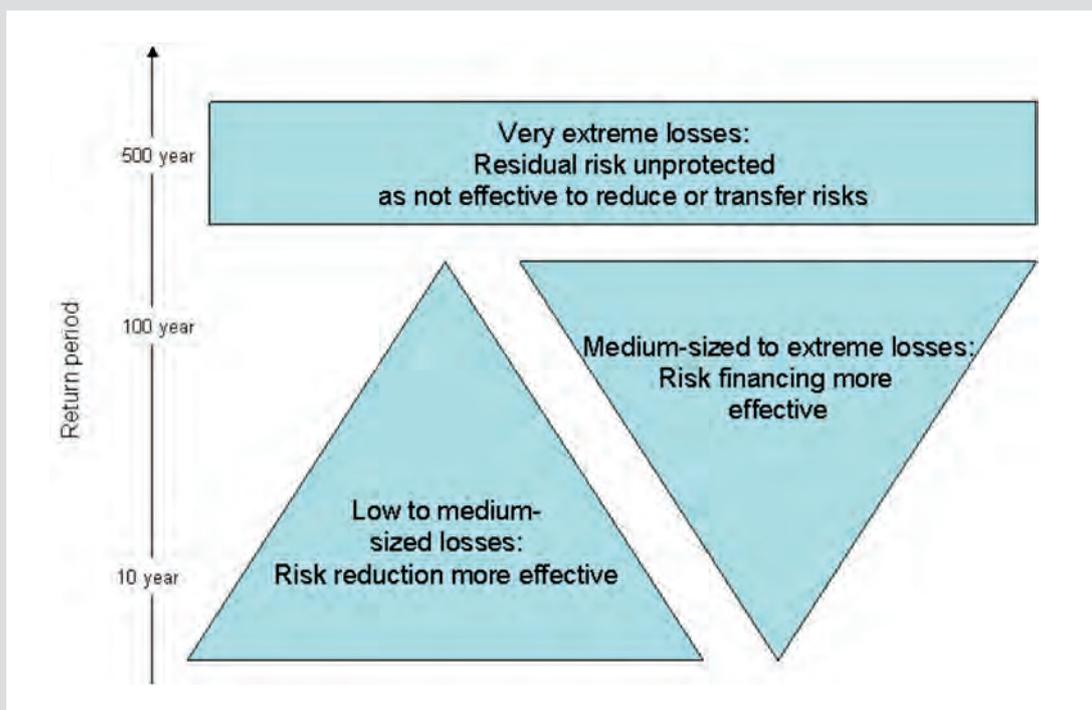


Source: Benson and Twigg (2004).

consequences (catastrophes). Finally, as shown in the uppermost layer of Figure 3, most individuals and governments find it too costly to insure against very extreme risks occurring less frequently than, say, every 500 years. If such events happen, often the only sources of support are national and international assistance.

A truly risk-based analysis is of key importance in order to identify the most suitable options for certain portions of risk because disaster risk is probabilistic and DRM options are effective for certain layers of risk. Disaster risk is probabilistic and linked to a probability or return period. While many events in life or the economy (sickness, stock

**Figure 3. The layering approach for risk reduction and risk financing**



Source: Mechler (2010).

market fluctuations, business default) are probabilistic, they often can be fairly well approximated by average values unless the tails of the distributions are 'fat'. The recent financial crisis has been an example, where there was recognition that there is a need for considering the tails and going beyond the means. Clearly, for disaster risk this is very important as by their nature they are 'non-normal' events, which happen infrequently, and it is common practice to use extreme value distributions, as shown above, to represent the chance of losses.

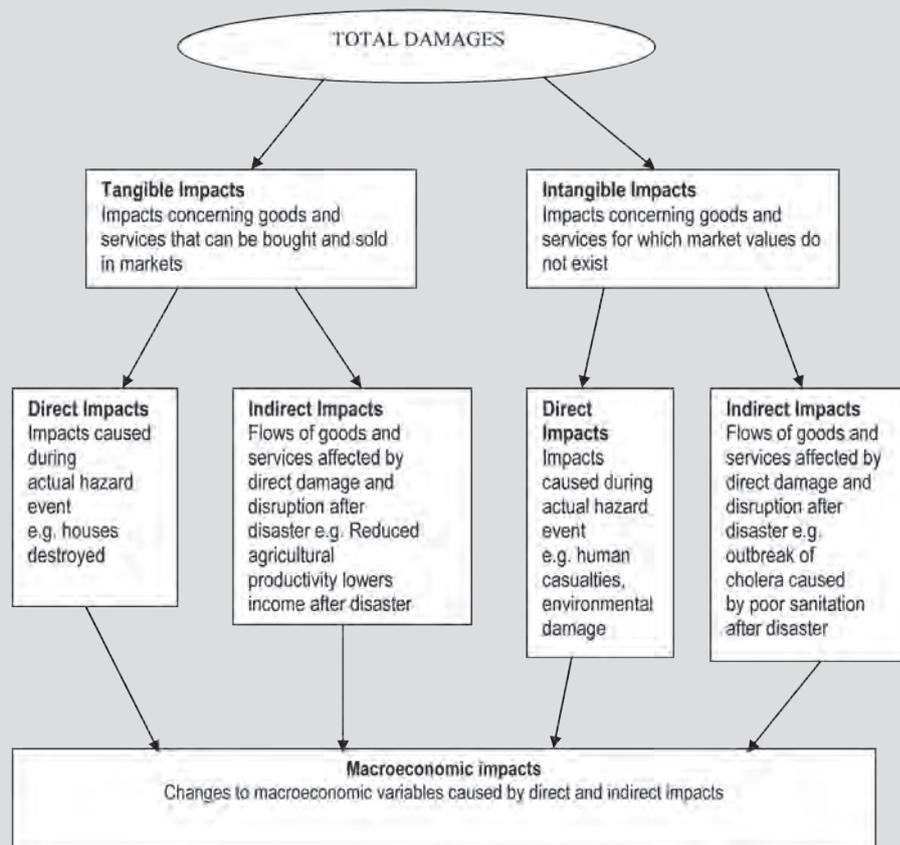
### Challenges associated with assessing intangibles and indirect effects

Quantitative disaster risk modelling has focussed on direct, structural losses (such as in flood risk prevention), and less so on the indirect and intangible effects. While techniques exist for quantifying avoided losses and valuing non-market benefits or costs, measurement challenges are major and, more fundamentally, techniques for valuation are often controversial. As well, many of the costs and benefits from DRM can be indirect, yet these can be difficult to identify and quantify for inclusion in CBA (see Table 4 and Figure 4).

**Table 4. Categories and characteristics of disaster impacts**

Categories of impacts	Characteristics
Direct	Immediate effects due to direct contact with disaster, (e.g. loss of life, physical and monetary losses)
Indirect	Occurring as a result of and response to the direct impacts in the medium-long term (e.g., relief, recovery, reconstruction costs, and longer term socioeconomic effects)
Tangibles	Impacts that have a market value and can generally be measured in monetary terms (e.g., structural losses)
Intangibles	Impacts, such as on health or on natural resources.

**Figure 4. The potential impacts caused by disasters**



Source: AusAid (2005).

In many cases, the benefits of DRM come as reduced impacts on household or country incomes and assets; yet there are no databases that systematically assess such effects and no standards for measuring these impacts. Non-market or intangible effects, such as loss of life or health impacts, are key for DRM. And while there are established techniques for valuing lives and injuries, e.g. as projections of lost future earnings, they all do not avoid value judgments and thus exert controversy (World Bank/United Nations, 2010). The same holds true for softer environmental and social values, such as existence values for environmental goods as well as the cohesion of social groups or communities.

### Assessing portfolios of systemic interventions vs. single interventions

While assessments of the economic efficiency of DRM may focus on hazard and risk-specific interventions and their specific costs, it is well understood that DRM interventions may most usefully be made up of portfolios of interventions. What is more, these options may be integrated in broader developmental contexts, and lead into investments on systemic interventions in sectors such as education, health or infrastructure, which may bring about large DRM related benefits by building resilience (or, as framed in the climate change context, adaptive capacity). A focus on bolstering resilience in terms of maintaining key system functions in the face of adversity, rather than reducing source-specific risk, calls for a systemic understanding of the interrelationships between development, resilience and shocks. As discussed by Moench et al. (2007), the importance of resilience in social systems for reducing the impacts from events such as drought in India and China has been well explained by Amartya Sen and others (see Sen, 1999).

Such a focus on systems thinking also invokes a distinction between hard and soft measures (see Moench et al., 2007). Hard resilience would refer to the strengthening of structures and physical components of systems in order to brace against shocks imposed by extremes such as earthquakes, storms and floods. In contrast, soft resilience would be built by a set of less tangible and process-oriented measures as well as policy in order to robustly cope with events as they occur and minimize adverse outcomes. To some extent, preparedness would be a part of soft resilience measures, yet structural measures can also exhibit some elements. It may be argued that the key distinction is between soft resilience referring to learning to live with risk, rather than assuming risk can fully be eliminated.

The role of inclusive and systemic approaches has been underlined recently with high confidence by the IPCC SREX report (IPCC, 2012):

*“Effective risk management generally involves a portfolio of actions to reduce and transfer risk and*

*to respond to events and disasters, as opposed to a singular focus on any one action or type of action (high confidence). Such integrated approaches are more effective when they are informed by and customized to specific local circumstances (high agreement, robust evidence). Successful strategies include a combination of hard infrastructure-based responses and soft solutions such as individual and institutional capacity building and ecosystem-based responses.”*

### Challenges in relation to data and uncertainty

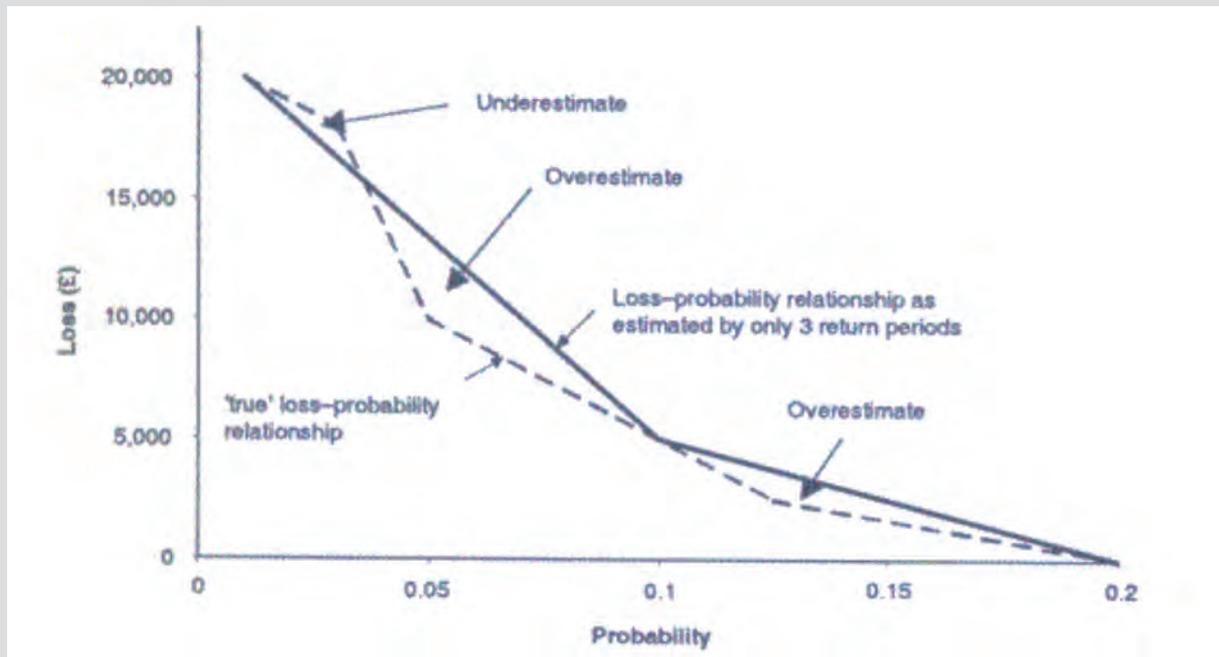
The lack of data and associated uncertainties are key challenges when calculating the benefits of preparedness interventions. Gaps and uncertainties are inherent and are related to the following issues and elements of measuring risk:

- *The recurrency of hazards:* estimates are often based on only a limited number of data points.
- *Incomplete damage assessments:* data will not be available for all relevant direct and indirect effects, and particularly so for the non-monetary effects. Estimates of damages from natural disasters often focus mainly on direct damages and loss of life, also due to the fact that there are difficulties in accounting for indirect and non-monetary damages. Yet, even figures on direct damages should be regarded as rough approximations since very few countries have systematic and reliable damage reporting procedures.
- *Assessing vulnerability:* vulnerability curves often do not exist and this information has to be generated, which is often fraught with complications.
- *Assessing exposure:* the dynamics of population increase and urban expansion should be accounted for.
- *Identifying the benefits of risk management and preparedness:* it is often difficult to accurately measure the effect and benefit of risk management measures, particularly when a set of options is being assessed.
- *Discounting the future:* the discount rate used reduces benefits over the lifetime of a project and thus has very important impact on results, yet different choices can be motivated.

For example, the following chart shows possible overestimation and underestimation biases when estimating risk by means of a loss-frequency distribution (Figure 5).

When fitting the distribution by a limited number of data points (e.g., in Figure 3, only three data points are available), losses may be overestimated or underestimated relative to the ‘true’ loss probability relationship. Of course, in practice the ‘true’ relationship is never known. What this chart demonstrates is that with more data points, the approximation to the underlying relationship is bound to get better. However, as already discussed, the number of data points that can be derived is often limited due to time and money constraints.

**Figure 5. Over- and under-estimation biases in estimating risk by means of loss-frequency distribution**



Source: Penning-Rowsell et al. (1992).

The depth and robustness of assessments to be conducted depends upon the objectives of the respective CBA including the data at hand on hazards and vulnerabilities, which consists of exposure and fragility, and finally impacts. It is commonly very time-intensive and difficult to find data on the elements of risk. Particularly, information on the degree of damage due to a certain hazard (vulnerability) is usually not readily available (see Table 5). As a consequence some CBAs base their estimations on past impacts and sometimes try to update these to current conditions.

Estimates of damages from natural disasters often focus mainly on direct damages and loss of life, also due to the fact that there are difficulties in accounting for indirect and intangible damages. Yet, even figures on direct damages should be regarded as rough approximations since very few countries have systematic and reliable damage reporting procedures. In addition, natural disasters by definition are rare events and thus information on past events is limited, which is an inherent challenge to assessing DRM options.

**Table 5. Data sources for hazards, exposure, vulnerability and impacts**

Component	Data source	Comment on availability and robustness of information
Hazards	Scientific publications and official statistics; post-disaster publications; geological, meteorological and water authorities; local governments and disaster management authorities	Data often available
Exposure	Statistical agencies, private firms and disaster management authorities	Data often at least partly available
Vulnerability	Specialized engineering reports and disaster management authorities	Usually not available and so has to be approximated by using vulnerability information from other sources or from past events. Need to do surveys or use expert assessments.
Impacts of past events	Official post-disaster publications; standardized databases; local, regional and national governments; industry and commercial groups and disaster management authorities	Some data is usually available, normally on direct economic impacts as well as direct social impacts (loss of life), but not on indirect and intangible effects.

Source: Mechler (2005).

What does all this imply for conducting CBAs and what efforts are needed to ‘overcome’ these challenges? Tackling these gaps and creating the requisite data will usually entail considerable costs and efforts. The type, analytical depth and robustness of assessment to be conducted depends upon the objectives of the respective CBA as well as data at hand on the hazards, vulnerability and exposure and finally impacts. In order to operationalize the assessment of hazards and vulnerabilities, risk and risk reduction and considering data and resource limitations for conducting CBAs, two frameworks for quantitative analysis are suggested (see Table 6).

In more rigorous and resource-intensive and *forward-looking risk-based frameworks*, data on hazards and vulnerability are combined and lead to estimates of the risk and the reduction of risks. Ideally, in forward-looking risk assessments, risk can be estimated by combining information on hazards and vulnerabilities. Often full-blown risk assessments are not feasible due to data, time and money constraints, particularly when the area at risk is large, is exposed to more than one hazard, or there are a large number of exposed assets with differential vulnerabilities.

In more pragmatic *backward-looking, impacts-based frameworks*, past damages are often used as the basis for coming to an understanding of current vulnerabilities, hazards and potential damages. In such cases, in a backward-looking assessment, past damages build the basis for a rougher understanding of risks and potential damages.

### Challenges inherent to CBA

Some challenges have been found to be inherent to CBA over the years, and cannot easily be solved. CBA cannot easily resolve conflicts and strong differences in value judgements that are often present in controversial projects

and policies (for example, nuclear power, biotechnology, and river management (see also Wenz, 1988; Gowdy, 2007)). The distribution of costs and benefits remains a key challenge. The general principle underlying CBA is the Kaldor-Hicks-Criterion, which holds that those benefiting from a specific project or policy should potentially be able to compensate those who are disadvantaged by it (Dasgupta and Pearce, 1978). Whether compensation is actually done, however, is often not of importance.

Techniques for considering the distribution of costs and benefits exist, yet these are relatively complicated and have not found wide usage (Little and Mirrlees, 1990). CBA’s ability to influence decision process and learning may be limited as a recent internal World Bank review shows. Also, as this review shows the usage of cost–benefit analysis for informing decisions on projects has been declining. CBA seems often to have only been carried out after key decisions have been taken with the technical analysis often prepared by consultants and senior project staff exhibiting more interest in project safeguards, procurement, and financial management. As a consequence, the potential of CBA to support learning has often been considered to be very limited (World Bank, 2010).

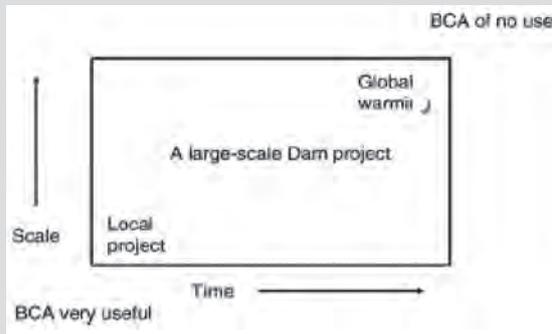
### Spatial and temporal scales

A key uncertainty relates to the scale of analysis performed (see Figure 6). While generally (with the exception of risk financing options) DRM will be implemented at sub-national levels, there is interest, particularly by policymakers, to generalize and work with national or global information. The scale of project is an important consideration when doing a CBA. While originally strictly focused on a project level, it has been used substantially to inform larger-scale investment decisions such as for dam construction, other large scale infrastructural development such as the siting of airports and nuclear reactors, and even for global climate change policy informing the

**Table 6. Types of assessments in context of CBA under risk and related case studies**

Type of assessment	Methodology	Data requirements	Costs and applicability
<b>Forward-looking assessments – risk-based</b>	Estimate hazards and vulnerabilities, then combine to risk, combine with climate modelling, e.g. regional climate downscaling	Locale and asset-specific data on hazards and vulnerability. Minimum of three data points. Global or regional climate circulation modelling.	More accurate, but time and data-intensive (up to several person years). More applicable for small scale risk management measures, e.g. retrofitting a school/building against seismic shocks. <b>Input to:</b> Pre-project appraisals or full project appraisals.
<b>Backward-looking assessments – impact-based</b>	Use past damages as manifestations of past risk, then update to current risks.	Data on past events, information on changes in hazard and vulnerability. Need minimum of three data points (past disaster events)	Leads to rougher estimates, but <b>more realistic and typical</b> for developing country contexts. More applicable for large scale risk management measures like flood protection for river basins with various and different exposed elements. Need experience with damages in the past. <b>Time effort:</b> in the range of several person-months. <b>Input to:</b> evaluation (ex-post) informational study

**Figure 6. Usefulness of CBA in time and space**



Source: Gowdy (2007).

UNFCCC negotiations. As Gowdy suggests, however, results from CBA may be most robust if analyses are well-specified in time and space. As the remit widens, it becomes less clear how the intervention produces costs and benefits and what other external factors come in to play. Assessing global warming by means of CBA is a good example, and here many factors, apart from specific interventions focussed on curbing emissions, play a key role (see Gowdy, 2007).

One additional complication is the dynamic (changing) nature of hazards and vulnerability, and therefore risk. Unless future risk patterns are known, the costs and benefits of risk management cannot be accurately calculated. While this is important as risk prevention investments are associated with time horizon of 10, 20 or 30 years, the future patterns are however often unknown or very difficult to project forward.

### Discounting and the choice of discount rate

The choice of discount rates affects CBA results heavily and, despite extensive research, there is debate on this issue. As one example, the Stern review led to heavy debates due to the suggestion made to use low discount rates in order not to discount away future debilitating

climate change, while mainstream economists suggested that market rates should be used instead (see Stern, 2006).

Beyond this discussion, a similar argument could be made for catastrophic risk characterized by 'fat tails' (i.e. events happening with low recurrency and leading to large impacts over future periods).

## Summarizing and reviewing the evidence

A recent global review of CBA studies on DRM interventions (Mechler, 2012) shows that for the limited evidence reported, the economic case for DRM across a range of hazards is strong and the benefits of investing in DRM outweigh the costs of doing so, on average, by about four times the cost in terms of avoided and reduced losses. Also, this assessment demonstrates that there is very little, but growing documented evidence on the efficiency and benefits of preventive measures, and little probabilistic analysis based on 'true' estimations of risk. Table 7 shows the degree of evidence available for various DRM options.

Unexpectedly, most interventions cover structural measures, most prominently, flood risk prevention and seismic retrofit. Yet, preparedness has increasingly been tackled and 10 out of 30 studies reviewed had a preparedness component. Risk financing assessments have held some appeal and some studies have aimed at assessing more comprehensive packages, such as flood risk prevention coupled with water management plans, or seismic retrofit integrated with risk financing.

### CBA studies on preparedness

Among the 30 studies assessed by Mechler (2012), 10 analyses had a preparedness component, 9 of which covered emergency/response preparedness in terms of considering the returns to land use and evacuation planning, training and capacity building, early warning,

**Table 7. Overview of use of CBA for assessing extreme event interventions and options**

Disaster risk management		
Prevention: Reducing risk	Preparedness: Preparing for risk	Risk financing: Transferring risk
Structural risk reduction works in flood risk prevention (sometimes coupled with water management or preparedness)	Land use and evacuation planning, training and capacity building, early warning, shelters, emergency kits, systemic interventions (often assessed in combination)	Risk transfer by means of (re) insurance for public infrastructure and national risk financing systems
Seismic retrofiting		
Drought risk reduction in agriculture and ecosystems		

Notes: Colour coding suggests the degree of evidence available: Red suggests relatively large evidence, orange medium evidence, and yellow only very few studies.

shelters and emergency kits. Also, three studies (Venton and Venton, 2004; Eucker et al. 2012; Venton et al. 2012) cover systemic preparedness interventions, of which Venton et al. (2012) does this exclusively. The cases cover many exposed regions in Africa, Asia, Oceania, the Americas and Europe. Also, options are implemented or assessed in combination. Seven studies are ex-post

evaluations, while three are ex-ante appraisals. Table 8 summarises these studies in terms of risk and interventions studied, the type of preparedness interventions, their benefits as far as assessed as well as the results overall in terms of B/C ratios. Emergency preparedness interventions are marked in bold.

**Table 8. Reviewing CBA studies on disaster preparedness**

Study-detail	Hazards	Overall intervention	Type of preparedness interventions (in bold = emergency focus)	Benefits	Results/returns
<b>Evaluations</b>					
BTRE (2002): Flood risk management – Australia	Floods	Structural and non-structural urban riverine flood prevention measures: Land use planning, building controls, voluntary purchase, levees, road sealing, preparedness	<b>Information and education programmes, emergency planning, forecasts and warning systems, state and national emergency services responses</b>	Direct and indirect losses reduced (on clean-up, disruption of business, emergency costs)	Substantial net benefits in terms of tangible direct and indirect losses reduced
Venton & Venton (2004) Risk management of floods – Bihar and Andhra Pradesh, India	Floods	Implemented combined disaster mitigation and preparedness programmes	<b>Capacity-building in terms of establishing village development committees, training village rescue and evacuation teams, establishing women's self-help group.</b>	Reduced losses of household possessions and livestock, reduced loss of life, reduced health impacts, reduced emergency spending	Bihar: B/C ratio: 3.8 (range: 3.2–4.6) Andhra Pradesh: B/C ratio: 13.4 (range: 3.7–20.1)
MMC (2005): Benefits across FEMA mitigation programmes – USA	Flood, wind, earthquake	Structural and non-structural interventions	<b>Mitigation plan, training, early warning, flood shelter, emergency kits</b>	Direct and indirect losses reduced (on clean-up, disruption of business, emergency costs)	Average B/C ratio: 4 based on a review of 5,479 grant based activities (flood 1.3–5; wind 0.05–50; earthquake 0–4)
Ghesquiere et al. (2006): Earthquake risk management – Colombia	Earthquakes	Risk prevention coupled with preparedness and risk financing	<b>Institutional strengthening of district authorities</b>	Reduction in fatalities and structural losses	B/C ratios range from 0.9–2.5
Fuchs et al. (2006): Avalanche risk reduction strategies – Davos, Switzerland	Avalanches	Wide variety of measures from land use planning and zoning, snow fences, capacity building, to reducing soil erosion	<b>Land use planning and zoning, capacity building</b>	Reduced fatalities and structural losses	B/C ratios range from 0–3.7
White and Rorick (2010): DRM flood interventions – Kailali district, Nepal	Flood	Capacity building, and training, early warning system, flood risk management	<b>Capacity building and training, early warning system</b>	Reduced losses to private and public assets, reduced health impacts due to contaminated water	B/C ratios range from 1.9–3.5
Eucker et al. (2012). Community-based flood risk management in four districts in Bangladesh	Floods	Community-awareness, risk prevention (through house plinths), livelihood support (rice distribution), emergency training	<b>Community-awareness, livelihood support (rice distribution), emergency training. (Only plinth raising was included in benefits assessment)</b>	Reduced losses to homes and contents, increased yields due to distribution of hybrid rice seeds	B/C ratios range from 1.2–4.9

Study-detail	Hazards	Overall intervention	Type of preparedness interventions (in bold = emergency focus)	Benefits	Results/returns
<b>Appraisals</b>					
Subbiah et al. (2008). Early warning for hurricanes and floods across number of case studies (Bangladesh, Sri Lanka, Vietnam, Thailand, Indonesia, India, Philippines)	Tropical cyclones, floods	Setting up and improving early warning systems for sudden onset events, as well as improved seasonal forecasting	Early warning	Reduced physical and economic losses	Mostly very high returns calculated (up to B/C ratio of 559); but no discounting conducted
Venton et al. (2010): Flood risk management as part of safer islands programme – Maldives	Floods	Coastal flood prevention for three islands and three interventions ranging from coastal protection to infrastructure proofing, and capacity building (in light of climate change threats)	<b>Capacity building</b>	Avoided losses to residential, industrial, commercial and public assets	BC ratio of 0.3–3.7 when summarized across all cases and interventions. Simple average across all results: 1.3
Venton et al. (2012): Building drought resilience for pastoralists – Kenya and Ethiopia	Droughts	Options for building resilience: livestock (improving access to markets, veterinary care, adequate feed and water), water (wells hand pumps, boreholes), and education (school construction)	Systemic interventions	Avoided aid expenditure, animal losses (livestock), reduced water borne diseases, reduced water collection times, increased school attendance (water), increased revenue and reduced reliance on food aid (education)	B/C ratios: Kenya: Livestock: 5.5; Water: 1.1–26; Education: 0.4 Ethiopia: Livestock: 3.8; Water: 5.5–27; Education: 0.4

Overall, the preparedness studies seem to offer substantial net benefits across different evaluations, hazards and locations. While some interventions exhibit B/C ratios of less than 1, in many instances the ratios are positive, and as stated in the recent review by Mechler (2012), an upper value of 4 for the best estimates per study seems reasonable for this set of studies, if the risk-based studies are counted in. This number clearly may only have appeal for advocacy, not for implementation, and the ranges of results can be large, and, as Table 9, constructed for a review on the costs and benefits of flood risk management by Hawley et al. (2012) shows, preparedness benefits may often even outweigh benefits from flood control and exposure modification with ranges of B/C ratio estimates from early warning of up to 70 and preparedness (in a narrow sense in terms of planning and enhancing resilience) of up to 24. At the same time, as to be discussed below, there are questions regarding the robustness of these numerical estimates.

Table 10 lays out the scope of coverage of the studies. Land use or evacuation planning as well as training and

capacity building is an essential element of the majority of interventions and analyses. Early warning was frequently assessed. Little attention has so far been given to flood or windstorm shelters and emergency kits. Interventions pertaining to systemic preparedness (building community capacity overall through enhanced generic education and health interventions) were only assessed in three studies.

When discussing the robustness of results, a key consideration is the depth of methodological detail applied. Table 11 shows how the key methodological challenges discussed above were tackled in terms of conducting a risk-based analysis, considering intangibles and indirect effects as well as conducting assessments of multiple interventions.

### Accounting for risk

Most analyses consider disaster risk probabilistically. Only three of the thirty studies took a deterministic approach (i.e. risk was not fully accounted for), and compared effects of interventions between two or more events, but not the whole spectrum of events possible as represented by a risk distribution. It is no coincidence that these three

**Table 9. Estimates of the B/C ratio of early warning and preparedness interventions**

Category	Type	BC ratio
Structural and non-structural flood control	Dam	0.7–1.34
	Dike	0.67
	Flood diversion	0.06–8.55
	Levee	0.26–1.03
	Drainage	–
	Embankment	0.38–4.9
	Restoration of flood plain	1.34–104.96
Exposure reduction and property modification	Proofing	0.53–8.07
	Zoning	–
	Building regulations	–
	Voluntary purchase	–
Behavioral response modification	Forecast and early warning system	0.96–70
	Preparedness	3.5–24

Source: Hawley et al. (2012).

**Table 10. Types of preparedness interventions assessed**

	Land use and evacuation planning	Training and capacity building	Early warning	Shelters	Emergency kits	Systemic interventions
<b>EVALUATIONS</b>						
BTRE (2002): flood risk management – Australia						
Venton and Venton (2004) Risk management of floods – India						
MMC (2005): Benefits across FEMA mitigation programs – USA						
Ghesquiere et al. (2006). Earthquake risk management – Colombia						
Fuchs et al. (2006): Avalanche risk reduction – Switzerland						
White and Rorick (2010): DRM flood interventions – Nepal						
Eucker et al. (2012). Community-based flood risk – Bangladesh						
<b>APPRAISALS</b>						
Subbiah et al. (2008). Early warning for hurricanes and floods						
Venton et al. (2010). Flood prevention as – Maldives						
Venton et al. (2012). Drought resilience for pastoralists – Kenya and Ethiopia						

**Table 11. Key methodological challenges assessed**

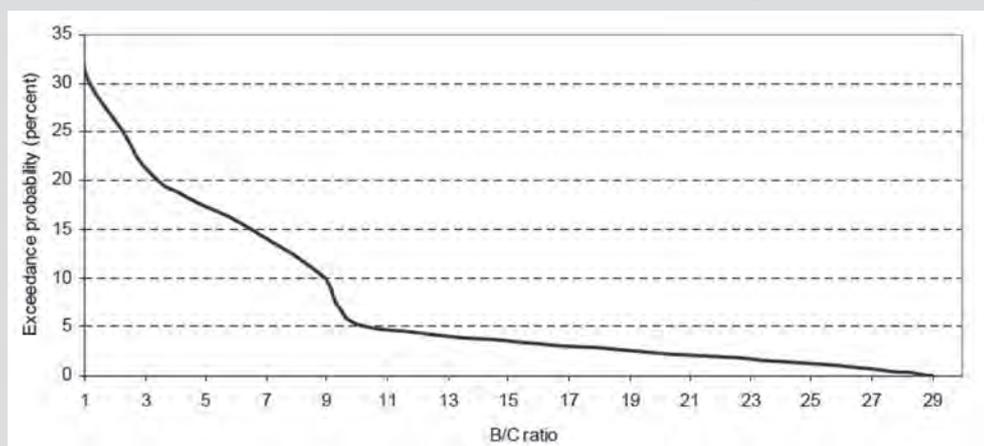
	Risk	Intangibles	Indirect effects	Multiple interventions
<b>EVALUATIONS</b>				
BTRE (2002): flood risk management – Australia	E			
Venton & Venton (2004): Risk management of floods – India				
MMC (2005): Benefits across FEMA mitigation programs – USA	E			
Ghesquiere et al. (2006). Earthquake risk management – Colombia	R			
Fuchs et al. (2006): Avalanche risk reduction – Switzerland	E			
White and Rorick (2010): DRM flood interventions – Nepal	E			
Eucker et al. (2012): Community-based flood risk – Bangladesh				
<b>APPRAISALS</b>				
Subbiah et al. (2008): Early warning for hurricanes and floods	E			
Venton et al. (2010): Flood prevention as – Maldives	E			
Venton et al. (2012): Drought resilience for pastoralists – Kenya and Ethiopia				

Note: E = expected annual loss, R = risk in terms of full probabilistic distribution.

studies examined systemic interventions as it is generally difficult, and maybe impossible in a robust way, to assess these in a CBA framework while giving proper attention to the probabilistic nature of disaster risks. Most of the studies reviewed assessed risks in terms of expectation and averages, and only one analysis made a probabilistic analysis as far as relating B/C ratios to layers of risk. This

analysis by Ghesquiere et al. (2006), which combined seismic risk prevention, preparedness and risk financing in Colombia, shows the importance of risk-based analysis by pointing out it may not be economically efficient to tackle really frequent risks. Figure 7 shows such output relating B/C ratios to risk for earthquake risk management in Colombia.

**Figure 7. Probabilistic B/C ratios for the benefits of earthquake risk management in Colombia**



Source: Ghesquiere et al. (2006).

The analysis shows that for the studied interventions, projects become more economically efficient the higher the risk (and less frequent in terms of the exceedance probability). Figure 7 shows that when risk management is applied to the total portion of earthquake risk, there is a probability of 32% that the project is cost-efficient (vice-versa, with a 68% chance it is not). Also, with 22% probability, benefits will exceed costs by a factor of about 3, and with 10% probability this ratio will be about 10. These findings highlight the need to better focus attention on reducing or transferring certain layers of risk, which is standardly not done in studies, but desirable. The downside to this suggestion is the enhanced complexity involved in conducting analyses and communicating results. While a fully risk-based analysis is desirable, using annual average/expected losses and benefits is a good approximation.

### Considering intangible impacts and benefits

It is possible to estimate values for many intangible elements, but as the MMC (2005) study notes, the necessary data are often not available. In some cases, this issue can be addressed by using benefit-transfer methods (essentially transferring the 'values' identified in the literature to the specific case being analysed). Both the valuation process and the transfer between cases can, however, be controversial. As a result, non-monetised costs and benefits are often ignored. The following example from the Venton and Venton (2004) study is rather typical as to what is feasible in terms of assessing benefits. Information on physical (structures and infrastructure) and economic (losses, relief and recovery spending) capital is often available and can be put into monetary values (with important caveats) if they have not been counted in this dimension already. Human

**Table 12. Identifying the benefits of DRM**

Type of impact	'Without'	'With'	Inclusion in model
<b>Natural</b>	Destruction of crops and soil from waterlogging	Planting of trees to increase soil stability	
<b>Physical</b>	'Kutchra' houses destroyed (where villages have a school it is normally 'pukka'. Other buildings are non-existent)	Houses still destroyed but village development fund has potential to provide loans in the future for rebuilding at lower rates than moneylenders.	
	Government hand pumps submerged and often rendered unuseable	Raised hand pumps ensure clean water supply	✓
	Loss of household possessions	Minimal/no loss due to effective evacuation	✓
	Loss of tools	Minimal/no loss due to effective evacuation	✓
	Loss of livestock*	Minimal/no loss due to effective evacuation	✓
<b>Human</b>	Drownings due to flooding	Reduced loss of life due to effective evacuation procedures/boats	✓
	Injuries during evacuation	Reduced injuries due to effective evacuation procedures/boats	✓
	Skin diseases prevalent on embankment	First-aid training helps in treatment of skin diseases, but no reduction in level of disease/illness	
<b>Social</b>	Breakdown of relationships – survival focus	VDC helps ensure that the community works together	
	High stress for all groups	Greater confidence for evacuation reduces stress levels	
		Women's self-help group helps build confidence	
<b>Economic</b>	Loss of work on embankment (no cropping, minimal alternatives)	No impact	
	Spending on boat rental	Provision of boat means community does not have to rent	✓
	Loss of education	No impact	

\*No other livelihood assets were reported to be lost.  
Source: Venton and Venton (2004).

impacts (i.e. people affected and killed) pose key ethical issues due to the need to value lives, particularly across countries and regions.

A contentious area of discussion concerns whether non-market values, such as impacts on human life, can and should be included in cost and benefit calculations. Many argue against measuring 'immeasurables' due to the value judgments involved, while others argue in favour of doing so as not doing so will omit important values. However, very few CBA studies on preparedness (Ghesquiere et al., 2006; Fuchs et al. 2006) and DRM have done this. One interesting example of a prospective CBA (focussed, however, only on seismic retrofit) was carried out by Smyth et al. (2004), who probabilistically estimated the economic efficiency of different seismic retrofitting measures for one representative apartment building in Istanbul, Turkey. Based on estimates of the expected direct damages and the costs of different retrofitting measures, the authors gauged the expected net present value of such measures. The analysis was conducted for different time horizons and with and without monetising fatalities. For example, for the option of bracing the building, the net present value was negative for all considered time horizons. This was similar for other measures as well.

Only when including fatalities at a value per life of US\$0.4 million, does the project become cost-efficient for time horizons longer than five years (Figure 8). This demonstrates the effects of including fatalities into estimates of losses, as well as considering a longer time

horizon. The longer the time horizon the more likely the occurrence of disaster events in the modelling exercise will generate benefits in terms of damages avoided.

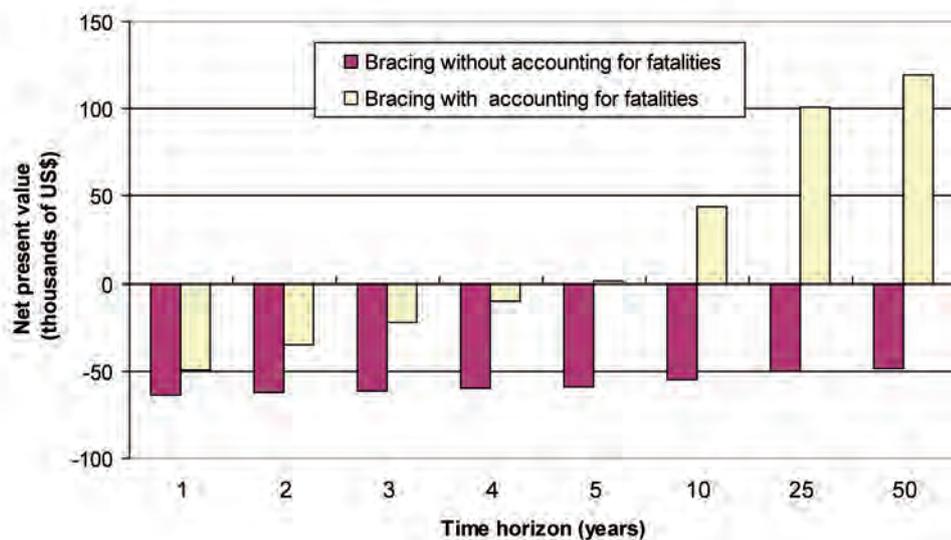
### Indirect effects

Many studies cover indirect effects in terms of rescue, relief, clean-up and emergency expenditure. Yet, most studies with one exception (Venton and Venton, 2004) consider as benefits not the economic costs in terms of avoided changes in utility or consumption (which economic analysis would call for in theory) – but the financial, monetary costs in terms of savings. This has to do with the fact, that the economic, indirect effects are generally not factored into DRM analyses. In this and other regards, the MMC (2005) study is a prime example (see Box 2), and as indirect effects it assessed reduced indirect business interruption losses, and the reduced need for emergency responses (e.g., ambulance services, fire protection).

### Multiple interventions

All preparedness options (as well as most DRM interventions) were part of sets of multiple interventions for flood, seismic, drought and windstorm risk alike, and bundles of interventions were studied, most often in conjunction with land use and evacuation planning. This finding, which is in contrast to CBAs for structural interventions, which often focus on single interventions, shows that a portfolio approach of multiple interventions is particularly important for preparedness. At the same time, it becomes more difficult to identify the key success factors providing for positive economic returns to the interventions.

Figure 8. Net present value of bracing an apartment building in Istanbul for different time horizons



Source: Smyth et al. (2004).

**Box 2.**

**The MMC (2005) study**

Mandated by the US Senate to better understand the benefits of risk management investments, the Federal Emergency Management Agency (FEMA) commissioned the Multihazard Mitigation Council (MMC) of the National Institute of Building Sciences (NIBS) to perform a study on the costs and benefits of DRM using CBA. Carried out by an interdisciplinary team of more than 30 experts, the study comprised:

- a benefit cost analysis of FEMA grants given post disaster to affected communities to build future resilience; and
- quantitative and qualitative research on the impacts of the grants in eight sample communities.

The benefit-cost analysis of the future savings from FEMA mitigation grants, for which between 1993 and 2003 US\$3.5 billion were given to states and communities, examined a sample of 357 out of the 5,479 grants. The MMC review based its benefit estimates of the reduced impacts across seismic risk, windstorm (hurricanes and tornados) and flood risk on the comprehensive HAZUS risk model. The review estimated a substantial number of impacts:

- Reduced direct property damage (e.g. to buildings, contents, bridges, pipelines).
- Reduced direct business interruption loss (e.g., damaged industrial, commercial, and retail facilities).
- Reduced indirect business interruption losses (e.g., ordinary economic ripple effects).
- Reduced (non-market) environmental damage (e.g., to wetlands, parks, wildlife).
- Reduced other non-market damage (e.g., to historic sites).
- Reduced societal losses (casualties, homelessness).
- The reduced need for emergency response (e.g., for ambulance services and fire protection).

An estimate for the sample of 357 grants was scaled-up leading to a total discounted present value of US\$14 billion in terms of societal benefits, which overall would be a B/C ratio of about 4. There is important variation across hazard, interventions and locations. Importantly, work funded by these grants was divided into projects building *hard resilience* (hazard-proofing or relocating buildings, lifelines and infrastructures, improving drainage systems and land conditions), as well as process-based activities leading to stimulating *soft resilience* by means of hazards, vulnerability, and risk assessments, planning, raising awareness and strengthening institutions.

**Summary results of the MMC (2005) study**

Hazard	Average B/C Ratio	Average B/C Ratio – project	Average BC ratio process	Range of estimates overall
Earthquakes	1.5	1.4	2.5	0–4.0
Wind	3.9	4.7	1.7	0.05–50
Floods	5.0	5.1	1.3	1.3–7.6
<b>Average</b>	<b>4.0</b>			

The study also estimated the present value of potential annual savings of the FEMA to the federal treasury alone to be US\$967 million against the annual budget investment on these grants of US\$265 million. This gives an average B/C ratio of fiscal benefits only of 3.7. In general, flood risk exhibited the highest returns, as flooding usually happens more frequent than wind and earthquake risks. Results were cross-checked and indicated in terms of ranges. Only very few of the grants for earthquake and wind risk were estimated to have not produced positive net returns (or B/C ratios larger than 1), while some interventions such as for wind risk produced very large effects in terms of B/C ratios in the range of 50!

Source: MMC (2005).

**Alternative approaches for decision-making on risk management**

CBA is only one tool for appraising and evaluating projects, and there are a number of alternative approaches for economic decision-support on risk management, some of which have recently received interest in the climate adaptation field. In order to put the applicability of CBA for DRM in context, we provide here a short discussion of other key tools such as cost-effectiveness analysis,

multi-criteria analysis as well as robust decision-making methods.

**Cost-effectiveness analysis**

Cost-effectiveness analysis (CEA) is used to identify least-cost options to meet a certain, per-defined target or policy objective. As the project costs are the key variable of consideration and subjected to finding cost-minimal solutions, CEA does not require the quantification of

benefits (which are fixed beforehand, such as reducing disaster fatalities and losses). One example is an assessment of the cost-effectiveness of seismic retrofitting in Romania conducted by the World Bank (World Bank, 2004). Cost-effectiveness analysis was used to select possible seismic retrofitting options for a number of sub-projects under a seismic retrofitting component of a comprehensive World Bank DRM project. Among others, the selection of sub-projects was guided by their contribution to life safety, while the cost of retrofitting was to be minimized below a total of 60 per cent of the cost of replacement in disaster events. There is little documentation regarding the use of cost-effectiveness analysis in the DRM field and preparedness.

### Multi-criteria analysis

Another decision-support approach is multi-criteria analysis (MCA). A very limited number of studies have used MCA tools in the context of managing extremes, such as Debels et al. (2009) for a quick evaluation of climate adaptation practices in Latin America, and De Bruin et al. (2009), who used a hybrid approach based on qualitative and quantitative assessments of adaptation options for flood risk in the Netherlands. The latter study identified an integrated portfolio of options for nature and water management with risk based policies, which exhibited particularly high potential and acceptance for stakeholders.

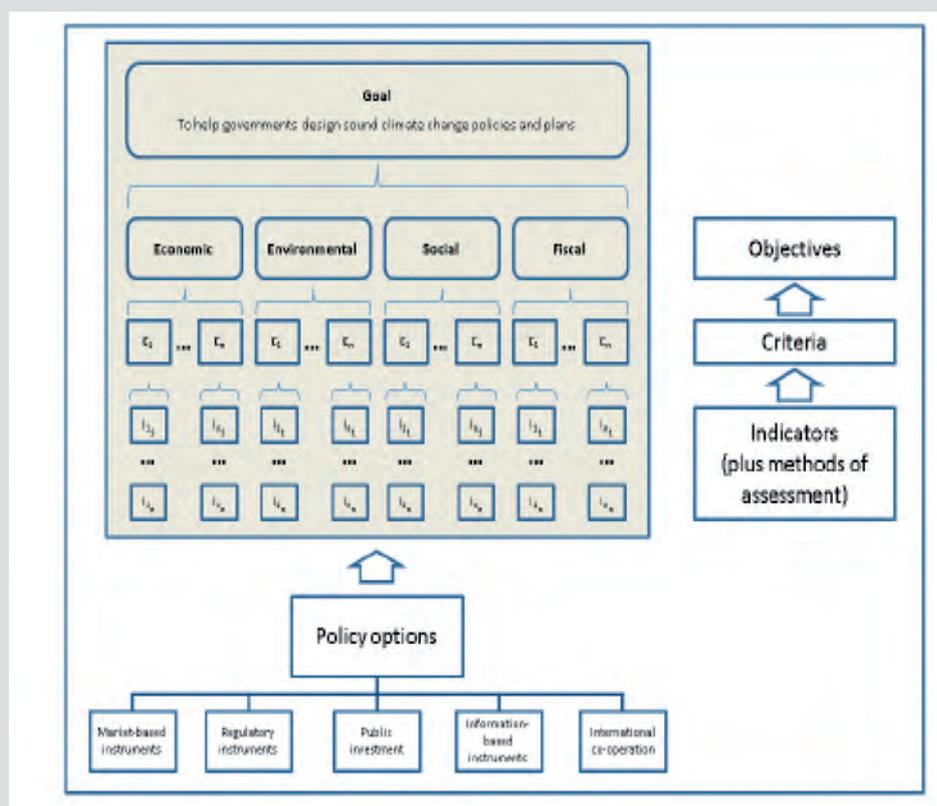
With an emphasis on low cost (not 'least cost' as in CEA, and optimal cost in relation to benefits as in CBA), the methodology is organized around objectives, criteria and indicators. Criteria are attributes, which can be used to compare the performance of different (policy) options in achieving a certain objective (economic, social, environmental and fiscal criteria). As a next methodological element, indicators are verifiable measures, which can be used to monitor changes over time and space in the behaviour of the attributes mentioned above. They can be expressed in quantitative (monetary or not) or qualitative terms.

The idea is based on the following principles (Figure 9):

- policies have multi-dimensional impacts on human societies and the environment;
- the impacts can be clustered into economic, social, environmental and governance objectives, for which criteria (such as improved economic performance or high employment) are specified, which are later on measured by way of indicators; and
- dimensions, criteria and indicators are then weighted per subjective value given to these, and can even be aggregated to one numerical, dimensionless index, which might be used to compare the performance of different strategies and projects.

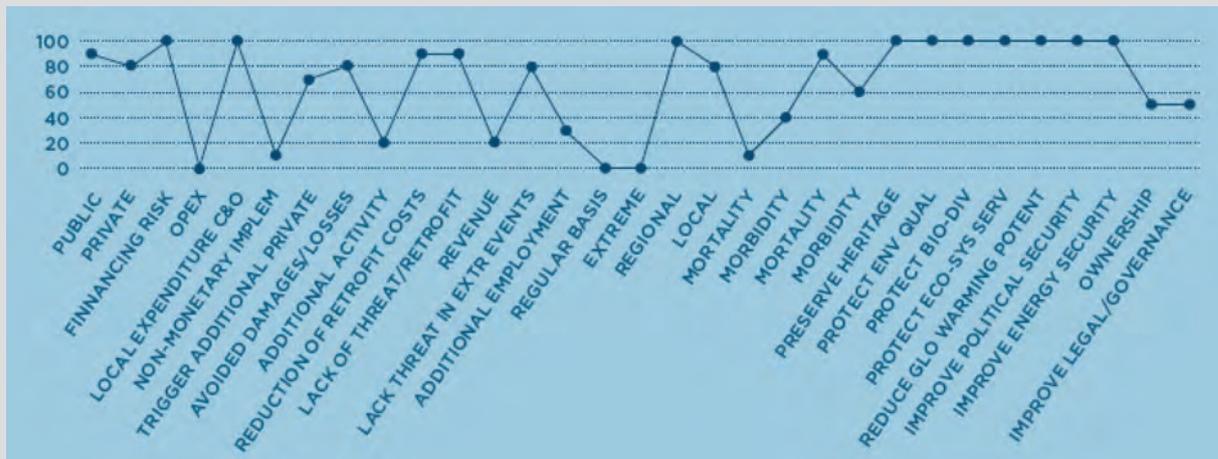
As one example, such an approach has been applied to DRM in the UNEP project 'Multicriteria Analysis for

Figure 9. MCA approach to evaluating DRM



Source: UNEP (2011).

Figure 10. Using MCA to score achievement of buildings code options against key criteria



Source: UNEP (2011).

Climate Change' (MCA4Climate), which was commissioned to provide practical assistance to governments in preparing climate change mitigation and adaptation strategies. The objective is to assist government decision-makers, particularly in developing countries to identify and examine policy options and measures for climate change that are low cost, environmentally effective and in line with national development priorities (see UNEP, 2011; <http://www.mca4climate.info>). As one example, the MCA4C project in a case study on increasing structural resilience in Mumbai assessed the option of improved building codes in terms of amending existing building regulations and, where necessary, introducing new regulations to ensure that in 20 years' time all floodplain buildings are on stilts, and earthquake-proof. The achievement of this objective was measured on a scale of 100 (a perfect fit) to 0 (no fit at all). Figure 10 shows the achievement across the universe of these indicators, which ranges from public sector costs over creating additional employment, reducing mortality to improving legal context and governance.

MCA in this project appeared a promising process-based tool for getting buy-in and interest of policy-advisers and makers; yet, as reading Figure 10 illustrates, there is a high degree of subjective judgment involved. As a consequence, it is difficult to easily replicate the evaluation route taken and the choices made by an analyst. In this regard the methodology is more comprehensive, but less rigorous than CBA.

### Robust decision-supporting approaches

Lately, in the context of climate adaptation, so-called robust decision-supporting approaches are receiving increasing emphasis. This set of options, comprising quantitative as well as qualitative approaches, focuses on optimal decisions (such as supported with CBA) and identifying options with *minimum regret*, i.e. minimum

losses in benefits in a chosen strategy where some parameters have been uncertain. A key aspect is the notion of iteration and repeated analysis with modified assumptions and scenarios. Quantitatively, it may mean running many simulations for tracing out uncertainty across key variables. The associated methods are however rather complex and often require advanced statistical and mathematical expertise (Lempert and Collins, 2007; Ranger et al., 2010). A qualitative framework has been worked out in the IPCC SREX framed around the concept of *low regrets* options. Such options are defined as follows:

*“Measures that provide benefits under current climate and a range of future climate change scenarios, called low-regrets measures, are available starting points for addressing projected trends in exposure, vulnerability, and climate extremes. They have the potential to offer benefits now and lay the foundation for addressing projected changes (high agreement, medium evidence). Many of these low-regrets strategies produce co-benefits, help address other development goals, such as improvements in livelihoods, human well-being, and biodiversity conservation, and help minimize the scope for maladaptation”.* (IPCC, 2012)

As one example, managing drought risk in the context of food insecurity in West Africa may be an interesting case (see Figure 11). Drought risk is a concern of life and death for the Sub-Saharan region, and in West Africa, droughts had an increasing trend over the last few decades. Evidence on such trends is rather solid, and in IPCC language, confidence in this trend truly occurring is *medium*, meaning rather solid, but not fully pervasive. Now, in terms of future risk, projections of drought, given a limited number of model analyses, however, leads to the finding that droughts may increase, but with only *low confidence*.

**Figure 11. Risk factors and options for managing the risk of droughts and food security in West Africa**



Source: IPCC (2012).

This signal induced by climate change appears thus weak, probably too weak to commit action in terms of climate adaptation on future droughts to serious review, including through economic analysis using CBA. Yet, importantly, there are many risk factors and options that are creating benefits now and likely in the future that can be tackled. Among the risk factors are the current rainfall variability (hazard), population growth (exposure), ecosystem degradation and poor health and educational systems that affect vulnerability. Among options that can be taken are improved water management, sustainable farming practices, drought resistant crops and drought forecasting. This approach overall emphasises effective and robust portfolios of risk management as well as

systemic interventions. The framing of *low regrets options* analysis discussed here and in the IPCC publication is largely conceptual, yet there are analytical tools that can be employed to operationalise the concepts, as has been the case for environmental and climate change related problems.

### Summary of alternative decision support techniques

To summarise, Table 13 shows the differential applicability of CBA and other decision-support techniques across decisions and interventions.

**Table 13. Characteristics and applicability of different decision-support tools for assessing disaster risk management**

Decision support tool	Advantages	Disadvantages/ challenges	Applications
<b>CBA</b>	A rigorous framework based on comparing costs with benefits	Need for monetising all benefits and the difficulty of representing plural values	Well-specified <i>hard-resilience</i> projects with economic benefits
<b>CEA</b>	Ambition level fixed, and only costs to be compared. Intangible benefits accounted for. Loss of life does not need to be monetised	Ambition level needs to be fixed and agreed upon	Well-specified interventions with important intangible impacts, which should not be exceeded (loss of life etc.)
<b>MCA</b>	Considers multiple objectives and plural values	Subjective judgments required, which hinder replication	Multiple and systemic interventions involving plural values
<b>Robust approaches</b>	Addressing uncertainty and robustness	Technical and computing skills required	Projects with large uncertainties and long timeframes

Note: CBA=cost-benefit analysis, CEA = cost-effectiveness analysis, MCA = multi-criteria analysis.

## Discussion: going forward with and beyond CBA in the ODI project

As this report shows, increasingly disaster preparedness interventions are being studied in terms of their cost-efficiency using cost-benefit analysis. Among the 30 studies assessed by Mechler (2012) 10 analyses had a preparedness component, 9 of which covered emergency/response preparedness, and 3 (1 exclusively) systemic preparedness. The review shows that DRM interventions built around or employing preparedness interventions seem to offer large benefits, also when compared to interventions controlling hazard as well as exposure. Yet, the available evidence is *limited* and based on *medium agreement* across the studies, which could be summarized along IPCC confidence language terms (see IPCC, 2011) as *low confidence*. There are many important caveats to consider, of which three appear important:

- Risk is not always properly considered in the studies in terms of recurrency of events, which may lead to *overestimating* the benefits of interventions.
- Many gaps and omissions exist in terms of not counting intangible and indirect effects, which leads to an *underestimation* bias.
- Systemic interventions, increasingly discussed by practitioners and policymakers, pose large challenges, with the estimation bias being unclear.

In theory, and as demonstrated here, also in practice, some of these challenges and problems can be solved in order to render results more robust: Analyses are increasingly taking a risk-based route, and often indirect effects are considered. Yet, the challenges associated with intangible benefits and systemic interventions seem difficult to surmount and unlikely to go away. These challenges are particularly pronounced for disaster preparedness, which is oriented towards modifying socioeconomic vulnerability and consequently many benefits produced are intangible, such as reductions in loss of life, adverse health effects, loss of wellbeing and impacts on natural resources. At the same time, interlinked and crosscutting projects – as well as evaluating strategies that build *soft resilience* – are at the heart of preparedness-based interventions, yet do not easily render themselves to rigorous cost and benefit accounting.

### Going forward with CBA

CBA will continue to appeal to decision-makers and practitioners due to its intuitive ease, and in fact, many analysts see its main strength in that it is an explicit and rigorous accounting tool for measuring those costs and benefits, gains and losses, that can be effectively monetised, and in so doing, helping to make decisions more transparent. We suggest that if CBA is to be applied to preparedness, any considered applications should have a large part of their benefits associated with direct and indirect benefits that are measurable rather robustly. Also, care should

be exercised when interpreting and using CBA results for informing decisions. The challenges and advantages of CBA are well known to decision makers, yet field practitioners working on DRM may be less well-versed in the nuances of costs and benefits of DRM as well as ways to interject results into decision-making processes. Identifying and explaining the robustness of results is a key imperative to for laying out any omissions and gaps in estimating the benefits and results and they should generally be shown as ranges.

### Going beyond CBA

However, the fact that CBA has not often been truly used to prioritise the implementation of options and important technical challenges are often incurred – related to conducting full blown analyses, particularly in data poor environments – may mean that the effectiveness of using CBA may be more related to *process* than *outcome*. This would mean that CBA is most useful as a heuristic decision support or advocacy tool that helps practitioners and policymakers to categorise, organize, assess, and present information on the costs and benefits of specific projects, policies and strategies, rather than giving definite answers that directly lead to the prioritisation of options to reduce, prepare for and financing disaster risk.

More fundamentally, other decision support tools are worth investigating for evaluating preparedness in order to go beyond monetising and aggregating costs and benefits where such a focus is not appropriate. More holistic methods, such as cost-effectiveness analysis, multi-criteria analysis or robust decision-making approaches are prime candidates. Particularly, multi-criteria analysis and evaluations using robustness as a criterion and focussing on so-called low regrets measures seem very useful. Indeed the climate adaptation context and practice field is embracing these currently, thus creating synergies with the DRM context. Robust approaches foster a stronger focus on the uncertainty of risks and a focus on the overlap with benefits of today's development decisions, at the same time relaxing the strict decision criterion that benefits have to exceed costs. Such framing provides useful entry points for crosscutting and systemic interventions involving disaster risk management, climate adaptation, and development projects and policies more generally.

While formalizations exist, there has not been abundant application generally and specifically for the field of climate adaptation. One challenge here is that the application of such approaches requires advanced statistical and mathematical skills and results cannot as easily and intuitively be summarized as compared to using B/C ratios as done in CBA. Multi-criteria analysis is equally useful for evaluating systemic interventions involving plural values and can be used to monitor the process followed for deriving decisions. At the same time, the need to make

subjective judgments can hinder replication of a specific decision route taken, and limit generalization across decision-making contexts. In sum, all the decision support tools discussed have their merits and downsides, and their specific application in the context of preparedness and generally should be carefully considered.

### **Need for further analysis**

As the review demonstrates there is need for further evidence-based analysis to work towards more robustness of the results. Currently, the evidence base is rather limited, and should be built up by studying interventions

across a larger set of regions and interventions. As well, using CBA for assessing the business case for emergency preparedness reaches limits where benefits are intangible or difficult to attribute to interventions, such as those related to governance more broadly (institutional and legislative frameworks, national plans of action and national platforms, inter-agency coordination). Here, applying novel approaches using alternative decision-making techniques would be desirable to work towards making an intelligent case for investing into emergency preparedness.

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# Emergency preparedness in Niger: a cost–benefit analysis

*Courtenay Cabot Venton, Fabien Richard and Katie Peters*

## Introduction

### Introduction to the study

Under the leadership of the Inter Agency Steering Committee (IASC), the humanitarian community supported the Overseas Development Institute (ODI) to undertake an investigation into financing emergency preparedness. This work has the two inter-connected goals of building the evidence base for emergency preparedness, and making recommendations for an improved financing architecture for preparedness. Much of this work has focused on in-depth field research in five countries, in order to better understand the risk context, needs, institutional arrangements, policy environment, financing instruments and channels of delivery for emergency preparedness.

As part of ODI's research into funding emergency preparedness, an examination was made into the possibilities of cost–benefit analysis, and the advantages and limitations this type of analysis brings. A report was subsequently prepared that examined in detail the current thinking and practice on the costs and benefits of risk management. After consultation between ODI and the IASC Sub-Working Group on Financing for Emergency Preparedness Task Team and Advisory Group, and the current chair of the Food and Agriculture Organization of the United Nations (FAO), it was agreed that a follow-up analysis would be undertaken on the specifics of the cost–benefits of emergency preparedness.

This review gives specific attention to the importance of complex emergencies where the interplay of natural hazards and conflict are of particular importance to both national actors and the international aid system.

### Aim of the assignment

The aim of the assignment is to examine the costs and benefits of financing emergency preparedness in Niger.

### Definition and scope

This work will use the definition presented in the final synthesis report for this project (Kellett and Harris, 2012):

*'Emergency preparedness aims to build the resilience of states and societies by strengthening the local, national and global capacity to minimise loss of life*

*and livelihoods, to ensure effective response to all crises, natural and man-made.'* (Kellett and Peters, 2014)

More importantly, emergency preparedness is regarded as a broad (but clearly identified) set of activities (see Table 1).

It is important to note that, whilst these activities are categorised in Table 1, preparedness interventions are best thought of as part of a portfolio approach. Unlike other sectors, where investment can be made using a variety of technologies and approaches (for instance, lack of water can be addressed through a whole range of approaches, from providing piped water, to digging wells and rainwater harvesting), emergency preparedness requires a holistic approach. The suite of preparedness activities which together create a preparedness system should work in tandem and support one another. For example, early warning systems will not be effective if they are not supported by a contingency plan that clearly delineates roles and activities in the case of an early warning, and without the institutional capacity to put this in place. Similarly, pre-positioning and stock piling are purposeless unless there is a clear system for indicating when and how those stocks will be used, methods for deployment, with positioning based upon risk assessments. As a result, the issue is not what to invest in, but rather a clear imperative to invest in the whole package of necessary activities.

### Structure of the report

This report is structured as follows:

- The next section provides the country context and risk profile, as well as a brief overview of the framework for emergency preparedness currently in place in Niger.
- The following section presents the economic analysis. This includes both a qualitative assessment of the potential impacts and outcomes arising from emergency preparedness, followed by the quantitative assessment that forms the bulk of the analysis.
- The final section presents conclusions and recommendations from the study findings.

This report is a high level overview. The scope of the work did not permit detailed investigation of in-country budgets (e.g. a line-by-line coding and categorization exercise of

**Table 1. Preparedness matrix: categories of emergency preparedness**

Categories	Activities
Hazard/risk analysis and early warning	<ul style="list-style-type: none"> <li>• Early warning systems (local, national, regional and international)</li> <li>• Hazard/risk analysis</li> </ul>
Institutional and legislative frameworks	<ul style="list-style-type: none"> <li>• Institutional and legislative frameworks, resource allocation and funding mechanisms</li> <li>• National Plan of Action, National Platform, National Disaster Management Authority</li> <li>• Regional agreements</li> <li>• International agreements</li> </ul>
Resource allocation and funding	<ul style="list-style-type: none"> <li>• National and regional risk pooling mechanisms</li> <li>• International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>• Government coordination mechanisms</li> <li>• National and sub-national leadership structures</li> <li>• Inter-agency coordination – national and sub-national</li> <li>• Cluster/sector established contextual standards</li> </ul>
Information management and communication	<ul style="list-style-type: none"> <li>• Information management systems – national, regional and international</li> <li>• Communication systems</li> <li>• Cluster/sector information management systems – GIS, 4Ws<sup>1</sup></li> </ul>
Contingency/preparedness and response planning	<ul style="list-style-type: none"> <li>• Community preparedness</li> <li>• Contingency / Preparedness and Response Planning</li> </ul>
Training and exercises	<ul style="list-style-type: none"> <li>• Simulations, drills – with the presence of national and / or international actors</li> <li>• Accredited training opportunities</li> <li>• Specific country context training opportunities</li> </ul>
Emergency services/standby arrangements and prepositioning	<ul style="list-style-type: none"> <li>• Stockpiling – national, regional and international</li> <li>• Civil protection, emergency services, search and rescue</li> <li>• Contingency partnership agreements – national, regional and international</li> </ul>

what constitutes emergency preparedness). As such, the analysis has combined the existing, albeit limited datasets that exist in country.

It should also be noted that this report sits alongside several other reports. The following are the most relevant:

- The ODI synthesis report (Kellett and Peters, 2014) describes the state of the financing of emergency preparedness, drawing on five country case studies (Haiti, Myanmar, Philippines, Sudan and Niger). This report outlines how preparedness is currently financed, the mechanisms and tools which support preparedness actions, and the challenges and limitations that currently exist. The report concludes that whilst increased levels of financing for preparedness are required, these can only be effective if channelled in ways that support holistic preparedness systems that address country-specific needs based on a comprehensive understanding of risk.
- The Niger country case study (Robitaille et al., 2013) includes more detailed information on the existing institutional and funding landscape of emergency preparedness covering existing structures and policies for emergency preparedness, as well as relevant data on funding flows.

## Context

### Country context

Niger is a vast arid and landlocked nation located in the Sahel Region in West Africa. Over 80% of its land area is covered by the Sahara Desert, and it shares borders with seven countries, including Algeria, Libya, Nigeria, Chad, and Mali. The Nigerien population, which is estimated to be over 17 million, is mostly clustered in the far south and west of the country (various sources including Robitaille et al., 2013).

The economy of Niger centres on subsistence crops, livestock, and some of the world's largest uranium deposits. In terms of socioeconomic status, Nigeriens suffer from severe poverty, with more than 43% of them living below the poverty line, with some estimates placing this figure as high as 60%<sup>2</sup>. Niger was ranked 186 out of 187 countries on the United Nation Development Programme's (UNDP) Human Development Index in 2013<sup>3</sup>. The very high levels of poverty mainly result from weak economic growth combined with high levels of vulnerability, an extremely high population growth rate and structural

<sup>1</sup> The 4 Ws are who, what, where and when.

<sup>2</sup> See: <http://hdr.undp.org/en/statistics/>

<sup>3</sup> See: <http://hdr.undp.org/en/statistics/>

deficits in agricultural crop production that results in almost permanent food insecurity<sup>4</sup>.

Since the Nigerian economy is largely based on agriculture<sup>5</sup>, which represents over 50% of its gross domestic product (GDP), the country's economy is highly sensitive to variations in weather conditions. Niger has one rainy season, which lasts an average of three months (from June to September) and a long dry season. The country suffers from uncertain, irregular and insufficient rainfall, which causes recurrent droughts and flooding events. Such conditions, coupled with increased climate variability and fragile political conditions in the region, make the socioeconomic context extremely vulnerable to exogenous (external) shocks.

### Hazards

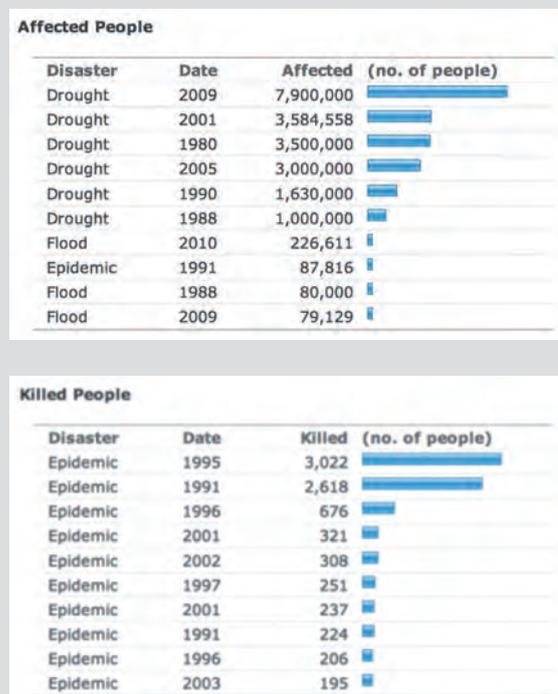
The 'World Risk Report 2012' ranks Niger as the second most vulnerable country to natural disasters out of 170 countries (Alliance Development Works, 2012). Its vulnerability to natural disasters is characterised by a high level of susceptibility coupled with lack of coping and adaptive capacities. Niger is ranked as the fifth most susceptible country, meaning that an extreme event triggered by a natural hazard would very likely cause severe harm, loss and disruption to the country and its socio-economic assets. High levels of susceptibility are caused by factors including poor infrastructure and housing conditions, high rates of under-nutrition, low economic capacity and high prevalence of poverty. The report says that Niger has a very limited capacity to minimise the direct negative impacts of present and future natural hazards and climate change. Poor governance also influences the government's ability and willingness to tackle natural hazards and insecurity; Niger is ranked amongst the top 20 countries in the 'Failed States Index 2012'.<sup>6</sup>

In term of exposure, Niger is recurrently affected by drought, floods, locust invasions and epidemics. The impacts are exacerbated by conflicts including unresolved internal tensions and instability coupled with insecurity and fragility within some of Niger's neighbours. Between 1980 and 2010, Niger witnessed 57 hazards and the cumulative number of persons continuously affected by hazards has been estimated at 21 million people (OFDA/CRED 2014).<sup>7</sup>

Droughts affect the most people in Niger. The most significant recent episodes have been the droughts of 1990, 2011, 2005 and 2009, which caused severe food crises affecting 16 million people (OFDA/CRED 2014). Recurring droughts are often coupled with insect infestations. In addition, flooding events constitute an increasing risk due to changes in rainfall patterns and the sharp increase in the number of people living in flood-prone areas. For example, floods in 2010 killed over 80,000 head of cattle and displaced 200,000 people<sup>8</sup>. In 2012, heavy rains caused flooding in various parts of Niger and affected over half a million people<sup>9</sup>.

Finally, epidemics are the most recurrent hazard in Niger, representing 31 of the 57 hazards that struck the country during the period from 1980 to 2010. Amongst the different hazards, epidemics historically have been the source of the largest number of deaths. Diseases with high epidemic potential occur frequently in Niger (WHO, 2006). In 2012, 4,800 cases of cholera and nearly 100 deaths were reported, as were 2.4 million cases of malaria and 2,857 associated deaths (as of October 2012). Natural hazards, combined with under-nutrition and poor sanitation and hygiene, suggest that the risk of health crises will remain high.

**Figure 1. Natural disasters with highest numbers of affected and recorded deaths**



Source: Prevention Web (2013).<sup>10</sup>

<sup>4</sup> See: <http://www.wfp.org/countries/niger/overview> Accessed November 2013.

<sup>5</sup> The agricultural economy is based largely upon internal markets, subsistence agriculture, and the export of raw commodities: food stuffs and cattle to neighbours.

<sup>6</sup> See: [http://www.foreignpolicy.com/failed\\_states\\_index\\_2012](http://www.foreignpolicy.com/failed_states_index_2012) Accessed November 2013.

<sup>7</sup> EM-DAT: The OFDA/CRED International Disaster Database, Université catholique de Louvain, Brussels, Belgium.

<sup>8</sup> See: <http://edition.cnn.com/2010/WORLD/africa/08/29/niger.floods/>

<sup>9</sup> See: <http://reliefweb.int/disaster/fi-2012-000141-ner>

<sup>10</sup> See: <http://www.preventionweb.net/english/countries/statistics/?cid=125>

The political situation in Niger is fragile. In 2009, the then President Tandja attempted to circumvent a two-term limit, resulting in a severe political crisis that led to a military coup in February 2010. A new president took office in 2011, following the adoption of a new constitution and local, legislative and presidential elections<sup>11</sup>. Niger and neighbouring Mali have faced periodic uprisings by Tuareg people since the 1960s. Niger is greatly affected by the current instability in the region, with Islamic radical groups such as Al-Qaeda in the Islamic Maghreb (AQMI) active in neighbouring countries, especially Mali. Conflicts in Mali and Nigeria have caused inflows into Niger of about 62,000 Malian refugees, more than 3,000 Nigerians, and thousands of Nigerian economic migrants (NRC and IDMC 2011; OCHA, 2013).

Violent extremism, illicit trafficking and terrorist security threats are increasing. In May 2013, two suicide attacks from jihadists, one on the military camp of Agadez and another in the French-operated uranium mine of Arlit, killed 26 and injured 30 people<sup>12</sup> (The Guardian, 2013). This complex risk context is exacerbated by the high levels of vulnerability prevalent throughout the country. Stagnating agricultural production leading to increasing levels of food insecurity constitutes one of the main drivers of vulnerability in Niger. The recurrent food insecurity has had a negative cumulative effect on the coping mechanisms of affected households, delaying longer-term recovery and development.

### Emergency preparedness

Starting in the early 1990s, the recurrent food crises within a context of high risk and vulnerability, led to the recognition of disaster risk management (DRM) and emergency preparedness as necessary priorities for ensuring sustainable and effective development for the country. Subsequently, disaster risk management and emergency preparedness have been progressively mainstreamed into sectoral and national policies, strategies and plans.

More specifically, the prevention and management components of disaster risk management were initially incorporated into food security planning prior to being increasingly included within broader national poverty reduction and development strategies. This gradual change led to the establishment of a comprehensive institutional structure for crisis prevention and management called the Dispositif National de Prévention et Gestion des Crises Alimentaires du Niger (DNP-GCA – National Food Crisis Prevention and Management Mechanism of Niger). Referred to as the Dispositif henceforth, this body is the central national agency for government emergency preparedness. While the Dispositif's mandate was extended from food security and

droughts to all types of disasters in 2012, it is still not fully operational in terms of dealing effectively with disasters such as floods, epidemics, conflicts and population migration i.e. types of disasters other than food crises. The underlying objective of the Dispositif was originally to reduce the vulnerability of the population to food crises by improving the coordination and management of interventions and actors. Hence, food-security related risks are relatively well addressed in comparison with other types of risks, for which preparedness activities remains low. This is despite the recent progress made, especially with the National Multi-Risk Contingency Plan and the Health Contingency Plan (refer to full Niger case study for more details [Robitaille et al., 2013]).

Along with governmental programming, a range of international organisations are working on a variety of emergency preparedness activities in Niger. These organizations include regional actors such as the African Development Bank (AFDB) and the African Union, seven operational United Nations agencies (OCHA, UNDP, WFP, FAO, WHO, UNHCR and UNICEF), donor agencies, as well as NGOs (CARE, Save the Children, Action against Hunger, Agency for Technical Cooperation and Development (ACTED) and CONCERN in particular). Currently, the United Nations agencies and the donors tend to focus on enhancing government preparedness capacities at the national level, mainly through support for early warning, risk and needs assessment, prepositioning, contingency planning, and coordination. The NGOs focus on addressing preparedness at community levels, especially through capacity building and trainings. While the international community is active and aware of the importance of emergency preparedness, implementation remains highly fragmented. The full range of emergency preparedness activities remain largely unidentifiable in project budgets as preparedness is currently not considered as an objective on its own but rather as an integrated component. Whilst valid, this makes an assessment of the relative contribution and impact of preparedness challenging to isolate (Robitaille et al., 2013).

Consequently, financial flows dedicated to emergency preparedness are very difficult to track as they are embedded within development and humanitarian funding. Moreover emergency preparedness is rarely coded in a way that would allow for identifying its value relative to other activities within given projects. Regarding development funding, a considerable part of the national budget and the international aid going to emergency preparedness is devoted to supporting the Dispositif, while a major part of humanitarian funding is channelled through the Consolidated Appeal Process (CAP). More specifically, the Dispositif, which includes the national early warning system (SAP) as well as the National Market Information System (SIMA), is mainly funded by the national government and the European Union, which finance 32% and 47% of the costs of the Dispositif. With regards to international humanitarian

<sup>11</sup> See: <http://www.worldbank.org/en/country/niger/overview>

<sup>12</sup> See: <http://www.guardian.co.uk/world/2013/may/23/niger-bomb-army-french-uranium>

aid and the CAP, roughly 13% of CAP funding is dedicated to emergency preparedness (Robitaille et al., 2013).

As a result, a major issue for preparedness funding in Niger lies in the fact that flows are largely split around the traditional humanitarian-development divide and lack a holistic approach across actors, sectors and timeframes. Such a divided structure, coupled with the fragmented nature of the international system and financing channels and mechanisms, results in a complex and unclear financing system, which is difficult to navigate. In this regard, the development of a clear and comprehensive plan of action for emergency preparedness across sectors – with a related financing mechanism – would help to clarify needs and financing requirements as well as to delineate the roles and responsibilities of each actor concerned. Such developments would allow for a more efficient approach to addressing the multitude of risks that exist in Niger across sectors. Table 2 elaborates some of the incentives and disincentives (including areas of weakness and/or gaps that need to be addressed) for investing in emergency preparedness in Niger.

## Economic analysis

### Introduction

This section details the cost and benefits of emergency preparedness in Niger.

- *Qualitative assessment:* The first section provides an overview of the full range of potential benefits from

emergency preparedness. Some of these can be monetized; others can only be described qualitatively.

- *Cost–benefit analysis:* Next comes an analysis of the benefits that can be quantified as a result of emergency preparedness, as well as the estimated costs required to achieve those benefits. These figures are combined to investigate the costs and benefits of investing in emergency preparedness.
- *Cost effectiveness analysis:* Data at a household level is then used to perform a cost effectiveness analysis. In other words, for a given outcome, in this case a person who has recovered from a crisis event, the costs per person are estimated for the counterfactual (i.e. no emergency preparedness), and for effective emergency preparedness.
- *Multi-criteria analysis (MCA):* Finally, MCA is used to identify a range of criteria that should be considered as part of the design of an effective emergency preparedness system.

The hypothesis is that emergency preparedness, as defined earlier in this report, will result in more timely and effective responses to crises. Of course, this is an assumption in and of itself as investments in emergency preparedness do not necessarily result in effective outcomes. However, the point of this analysis is to determine the benefits relative to the costs of investments in emergency preparedness that is assumed to deliver benefits. As such, investments are compared against the counterfactual where no to minimal emergency preparedness measures are in place, and hence responses are late and costly.

**Table 2. Incentives and disincentives for investing in emergency preparedness**

Incentives	Disincentives
<ul style="list-style-type: none"> <li>• Emergency preparedness can facilitate a greater focus on value chains by identifying components of the humanitarian aid system that can be locally sourced with greater planning (for example, WFP’s Purchase for Progress program which targets food purchase from local smallholder farmers, hence supporting local industry).</li> <li>• Emergency preparedness is cost-effective at a household level, and has the potential to reduce the impacts of crisis (and its response) on GDP and the macro-economy.</li> <li>• The moral imperative of early action for saving lives.</li> </ul>	<ul style="list-style-type: none"> <li>• The Dispositif is considered complex, bureaucratic and lacking national ownership.</li> <li>• Inadequate emergency preparedness implementation and coordination at the community level as attention is focused on the national government.</li> <li>• Humanitarian agencies’ culture is still oriented toward response rather than prevention and preparedness.</li> <li>• Lack of suitability of the international aid system for emergency preparedness activities and financing. In particular, the development-humanitarian divide does not suit the emergency preparedness continuum, which require a set of short-, medium-, and long-term actions that should be jointly conducted by all actors in a coordinated way.</li> <li>• Aid agencies have focused their advocacy efforts on the (somewhat loosely defined) concept of resilience rather than emergency preparedness.</li> <li>• Donors’ responsibility to spend money efficiently can be called into question if resources for preparedness are spent, but a crisis does not happen.</li> <li>• The lack of evidence gathered undermines the visibility of emergency preparedness outcomes.</li> <li>• Current monitoring and evaluation indicators act as a disincentive by focusing on quantitatively accounting for recipients reached in a response, rather than capacity or resilience built, or crises avoided (through humanitarian and development action).</li> </ul>

This type of analysis is complex. Niger faces numerous hazards, all of which are interlinked. Each type of hazard will have different costs (e.g. the costs of the humanitarian response, namely food and non-food aid) and losses (e.g. loss of assets, livelihoods, and lives as a result of disasters) associated with it. For example, rapid onset events such as floods have very different impacts as compared with slow onset events such as droughts. Further, the ability of emergency preparedness to drive down those losses will vary depending on the types of emergency preparedness measures in place, and the degree to which they impact different hazards. For example, early responses to slow onset droughts can significantly reduce caseloads, because there are significant lead times, whereas early responses to floods are less likely to have a significant effect on the number of people requiring assistance, as floods rapid occur and are more challenging to prepare for. Finally, determining the degree to which losses will likely be reduced is very difficult to estimate, and will differ depending on the type of disaster events.

This analysis of Niger considers a multi-hazard context. That said, it is extremely challenging to separate events and impacts in Niger, as they are interlinked. Different types of disasters often occur at the same time, and/or one feeds into the other, exacerbating impacts. That said, the data for drought impacts is much stronger, while data on flood impacts tends to be piecemeal and inconsistent, while data on the impacts of political insecurity, locusts and other hazards is almost non-existent.

A recent study (World Bank 2013) identified the pre-eminence of drought as the major source of risk for agricultural production in Niger. The agricultural sector, which is the mainstay of the economy, experiences the greatest losses, surpassing all other sources of risk in terms of both frequency and cost. The study identified locusts as the second most important source of risk (even without accounting for losses to the livestock sub-sector), followed by price fluctuations and floods.

The study further highlighted how, in a country as poor and risk prone as Niger, it is not sufficient to just identify the most important risk or risks to address, and to accordingly strengthen the capacity to manage such risks. Capacity must also be built to manage a constant stream of adverse events, of differing types and magnitudes, often in combination. For example, political instability has played a major role in droughts and food insecurity. The period from 1995–1996 was characterised by deep, continuous shocks to agricultural production, even though production conditions were not unduly harsh. The country and its population were thus poorly prepared for the

drought in 1997; and three consecutive years of extreme hardship followed (World Bank 2013).

Further to this, it is important to note that preparedness interventions do not stand-alone. Indeed, economic analyses of preparedness interventions need to recognise that preparedness measures address multiple risks by their very nature. By contrast, cost–benefit analyses for structural interventions often focus on single interventions. Because a portfolio approach is more relevant for preparedness, it also means that it becomes more difficult (and indeed inappropriate) to try and separate out impacts relating to specific interventions (Mechler, 2012).

## Methodology

The analysis presented below builds on existing data on the costs and losses associated with disaster risk in Niger, as well as the potential costs and benefits associated with emergency preparedness.

An extensive literature review was undertaken to gather this data, accompanied by consultations with in-country stakeholders. Sourcing material to contextualize the analysis included gathering the following types of data:

- *Hazard data* – Data on the frequency and magnitude of hazards, historic data, data on all major hazard types (with a focus on drought, floods, and conflict).
- *Impact data* – Data on the magnitude of impact of crisis events, including humanitarian response costs, as well as losses (e.g. infrastructure, crops, assets, GDP).
- *Costs of emergency preparedness* – The costs required to build an effective emergency preparedness system, including discussion around not only existing cost estimates, but around whether those estimates are sufficient.

The key data sets used in the analysis include the following:

- The government's annual support plans ('Plan de Soutien') estimate overall needs for food security and nutrition assistance during each year, related to all hazards that may occur<sup>14</sup>. These figures were further cross referenced against global datasets including the Financial Tracking Service (FTS) (a voluntary tracking service for humanitarian aid commitments) and the Global Humanitarian Assistance (GHA) database (which attempts to combine numerous sources of data on humanitarian aid flows).
- The World Bank study on estimated agricultural losses from hazard events in Niger (World Bank, 2013) is the most comprehensive (and one of the only) reports that quantifies potential losses. This was supplemented

<sup>13</sup> At least, not to the range and detail that is required to undertake cost–benefit or cost efficiency analyses.

<sup>14</sup> For an example of the 2011 plan (Republic of Niger, Prime Minister's Office, 2011), see: <http://www.embassyofniger.org/docs/otherofficialdocs/Plan-Soutien-Pop-Vulnerables.pdf>

with information from the Africa Risk Capacity Facility, which estimates potential losses generalized across six African countries, including Niger.

- The DFID series on 'The Economics of Early Response and Resilience' (TEERR) includes case study reports for Niger. These studies have combined detailed analysis from the World Food Programme (WFP) in Niger (Ballo and Bauer, 2013), as well as detailed modelling using the Household Economy Approach (HEA), to model the impact of droughts under early responses. This data is detailed and is used to build the cost effectiveness analysis (see later in this report).
- A report by the Government of Niger (Republic of Niger, Prime Ministers Office, 2013) assesses the impact of the 2012 floods, both in terms of the cost of the response, as well as the estimated costs of preparedness activities. This data has more limited applicability as the 2012 floods are estimated to have a return period of only 1 in 100 years. The data nonetheless gives a good indication of the magnitude of relative costs, and could usefully be built on to estimate similar costs for more frequent but less intense events.

Stakeholder interviews were used to not only identify any other sources of data, particularly those that were not publicly available, but also to probe the data contained in these reports to ensure they were used appropriately and accurately for application in this analysis. Data was then assessed and aggregated, using cost-benefit analysis, cost effectiveness analysis, and multi-criteria analysis; to assess the relative costs of emergency preparedness as compared with the benefits. This included assessing the types of qualitative factors that need to be included in any decision-making framework. Details of the analysis are contained in the discussion below.

It should be noted that this is a high level analysis, and that the data had many limitations. The concluding section of this report includes recommendations for how some of these data gaps might be filled. Importantly:

- While data on the cost of responding to disasters (mainly drought) was available, data on the subsequent losses associated with these events was lacking. Systematic data was available for crop losses due to droughts, which is a major area of impact in terms of frequency, scale, and value; however, data on losses including loss of assets and livestock, business interruption, and GDP losses, were not available. As a result, it is likely that the estimate of the cost of disasters without emergency preparedness is significantly understated, and hence the benefit-to-cost ratios are also understated.
- Along similar lines, without detailed data, it is difficult to estimate the degree to which losses will be reduced as a result of emergency preparedness. There is a great deal of anecdotal evidence that emergency preparedness reduces the loss of life, assets, and livelihoods

(including specifically, farming and livestock activities). But the extent of the saving will vary significantly depending on the magnitude of the hazard, the type of hazard (slow or rapid onset), and where the event takes place (for example near a major urban centre with high infrastructure value, or in a remote area with low populations). To address this, the analysis uses a range of several potential percentage points of reduction in losses.

- Losses will only be reduced if emergency preparedness measures are implemented to offset these losses. However, the depth and breadth of the measures required, and the exact specifications (and hence costs) of those measures, are points for discussion. While the best available cost figures for emergency preparedness measures are used, significant assumptions were made around how many years of investment are required, and whether the existing cost figures would be enough to effect change at the level required to bring about the subsequent reductions in losses.

A conservative stance is taken throughout the analysis. In other words, any changes to the assumptions should only improve the argument for investing in emergency preparedness. However, due to the limited scope of this analysis, and the lack of readily available data, the findings should be viewed as only indicative.

### Qualitative assessment of impacts

Strong anecdotal evidence points to the potential benefits of emergency preparedness including:

- Reduced unit costs of aid due to contingency planning, pre-positioning and early procurement.
- Reduced caseloads later on due to early responses before things get critical, and so food security, nutrition, and health are all stabilized with less inputs. As a result, caseloads, or the number of people requiring assistance, as well as the magnitude of assistance required per person, should be less.
- Reduction in losses as the losses of crops, livestock, possessions, livelihoods, and lives can all be reduced with emergency preparedness. For example, early warning and contingency planning can facilitate the earlier and faster evacuation of people and their possessions before floods hit, and greater preparedness for droughts can prevent losses by facilitating interventions early on.
- Greater sense of security and confidence as people know what to do, and when, to keep their families and possessions safe.

### Cost-benefit analysis

Many of the benefits of emergency preparedness can be quantified, including reductions in unit costs of aid, humanitarian caseloads, and losses. In order to quantify

the benefits of emergency preparedness, it is necessary to compare outcomes against the counterfactual – the situation if there was no emergency preparedness in place.

### **Counterfactual: no emergency preparedness**

Two components are costed for a scenario without emergency preparedness – the cost of response to hazards (e.g. food aid, shelter, medical care, etc.), as well as the losses incurred when a hazard event occurs (e.g. loss of lives and livelihoods).

#### **Cost of response**

The cost of humanitarian aid in Niger is documented by a number of sources.

The Financial Tracking Service (FTS) is a voluntary tracking service for humanitarian aid commitments and as such it is not necessarily systematic. According to the FTS, aid flows between 2000 and 2012 to Niger averaged US\$106m per year.<sup>15</sup>

The Global Humanitarian Assistance (GHA) initiative attempts to combine numerous sources of data on humanitarian aid flows, and estimates an average spend of US\$68m per year in Niger between 2001 and 2011.

Using data on historic modelled food security needs, an analysis undertaken for the Africa Risk Capacity Facility estimates the average annual response cost to drought (1983–2011) at US\$72m (Clarke and Vargas Hill, 2012).

Each of these estimates takes an average over a long timeframe, and therefore masks the significant increases in aid that have been required in the more recent past. Further to this, in recent years, food and nutrition programmes have become more complex in Niger. Whereas the emergency response in 2005 covered a short timeframe, with emphasis on general food distributions, the 2012 response was implemented from late 2011 through 2012, and had a much stronger focus on nutrition, namely through the use of specialized nutritious foods for the prevention of moderate acute malnutrition (Ballo and Bauer, 2013). (Note that the analysis presented here uses the most up-to-date and comprehensive figures.)

The government's annual support plan (the Plan de Soutien) estimates overall needs for food security and nutrition assistance during the year, related to all hazards that may occur. It allocated an average of US\$231m per year over the six years between 2008 and 2013. In November 2011, the 2012 consolidated appeal stood at US\$229m. By the time of its revision in April 2012, the needs had reached US\$487m. Neither the FTS nor the

GHA figures are close to this estimate for 2012. As a result, it is estimated that the GHA and the FTS estimates are likely to be significant underestimates, implying that spending is far below actual needs.

More recent data (compiled after this report was largely completed) revealed that in 2013, the 'UN and Partner Work-Plan' appealed for over US\$354 million to implement 83 projects (see Robitaille et al. 2013). It was 81% funded, making it the second highest funded appeal of any country in 2013. We arrived at a rough estimate of US\$48.2 million as the total amount for emergency preparedness from the CAP for 2013 – not an insubstantial amount. Most of this preparedness has been requested through projects in the nutrition, food security and health sectors (see Niger Case Study [Robitaille et al. 2013] for more details).

In 2013, the support plan estimated the cost of emergency preparedness at US\$14.1m (see Annex 1 for a breakdown), equivalent to approximately 6% of the total costs estimated for that year (the composition of these costs is described in greater detail in the cost section below). The same weighting is applied to the average costs cited above – in other words, the estimated cost of US\$231m is reduced to an estimated average cost of response of US\$217m per year.

#### **Losses**

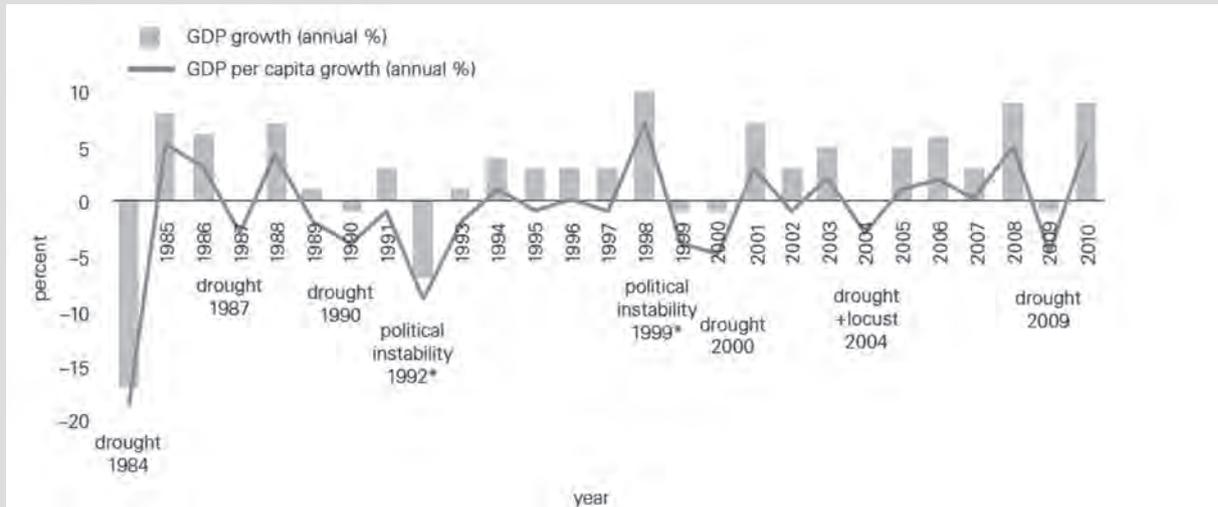
Losses associated with hazard events in Niger are very hard to estimate. Costs refer to the direct cost of responding with humanitarian aid after a given event. Further to this, those affected typically experience significant levels of loss with business activities interrupted, assets and crops destroyed, household incomes depleted as families suffer poor health, etc. Little data exists on losses, and the data that does exist is inconsistent.

However, losses are probably extensive. Figure 2 shows GDP over time, mapped against hazard events, and seems to demonstrate a relationship between drops in GDP growth rates and the occurrence of risk events (World Bank, 2013). That said, the myriad impacts on GDP make it very hard to isolate how much of these trends relate specifically to hazard events; so any correlations should be treated with caution.

The most comprehensive data source that quantifies losses in monetary terms found through consultations for this report is World Bank (2013). This study estimates crop losses associated with drought. This is likely to be a significant area of loss, and therefore provides a significant part of the picture. Based on the World Bank (2013) estimates for 'catastrophic' and 'severe' events, the estimated average annualized losses of crop production alone is US\$44m per year.

<sup>15</sup> See: <http://ochaonline.un.org/AppealsFunding/FinancialTracking/tabid/2665/language/en-US/Default.aspx>

Figure 2. Annual changes in GDP and GDP per capita



Source: World Bank (2013).

The actual losses are, however, likely to be significantly higher. For example, the 2012 floods caused economic damage of US\$181.5m (these floods are considered to be the worst in 100 years). Further, recurring losses to livestock, assets, and livelihoods are not included in the above estimate.

**Total cost: counterfactual**

These figures are not estimated in isolation as clearly some emergency preparedness has taken place over the last decade that has contributed to a reduction in losses, and at the same time, the nature of aid provision has also changed as described above. However, as a reasonable approximation of the counterfactual, estimated annual humanitarian aid costs and losses associated with hazard events in Niger are approximately US\$261m.

**Emergency preparedness: benefits**

Investment in emergency preparedness should result in numerous benefits, if implemented well, including:

- reduced unit cost of response
- reduced caseloads
- reduced losses.

These benefits were estimated using a study that conducted detailed modelling on the impact of drought on household economies. The study, 'The Economics of Early Response and Resilience in Niger' (TEERR) (Ballo and Bauer 2013), combined detailed analysis commissioned from the World Food Programme (WFP) specific to the cost of the humanitarian response in Niger, with the modelling of the effects of drought on household economies using the Household Economy Approach (HEA), to measure the household food deficit under different magnitudes of drought. This was modelled over 20 years using probabilistic risk modelling of drought risk recurrence.<sup>16</sup>

The data presented in the TEERR series pulls together the most relevant data available on drought risk in Niger. As discussed below, some of the data analysis is also applicable to flood risk.

The modelling presented here considers each of the three categories of benefit cited above separately. In other words, there is no double counting of benefits across categories.

**Reduced unit costs of response**

The cost of humanitarian responses is likely to decrease if emergency preparedness measures are in place and functioning well. This is for a variety of reasons – for example, contingency planning can allow for the prepositioning of stocks leading to a reduction in last minute transport costs, and the sourcing of can be pre-arranged at lower unit costs.

WFP Niger estimated that pre-planning in response to drought could reduce aid costs (food and non-food aid) to 89% of the costs of a scenario without any pre-planning, based largely on reducing the costs of cereals and transport (Ballo and Bauer 2013). These savings are applicable for flooding and conflict as well, as the savings on pre-planning apply to food and non-food aid in any emergency as it arises<sup>17</sup>.

The average annual aid costs under the Plan de Soutien are US\$217m. Applying the WFP estimate that aid costs

<sup>16</sup> Refer to the following website for the full set of TEERR reports, including assumptions and model outputs: <https://www.gov.uk/government/policies/helping-developing-countries-deal-with-humanitarian-emergencies/supporting-pages/helping-countries-protect-themselves-against-future-disasters>

<sup>17</sup> While this was not specifically explored in the TEERR Niger report, WFP did a similar analysis in Mozambique for both flooding and drought, and found that similar levels of unit cost savings were achieved.

would reduce to 89% of the total under a scenario with pre-planning through emergency preparedness, suggests that aid costs for the country would be reduced to US\$193m.<sup>18</sup>

The cost of humanitarian response in the Plan de Soutien includes the cost of relief supplies that are pre-positioned. It is not clear, however, whether this estimation accounts for the decreased unit costs of relief supplies that are pre-positioned. The text seems to indicate that it is not included – that full costs are used – and hence the 89% analysis in the cost of humanitarian response is applied to the full cost of relief as estimated above.

### Reduced caseloads

Emergency preparedness is likely to reduce caseloads, as it should foster more early responses, and hence responses can occur before asset depletion takes hold. This will be true especially for droughts, as slow onset disasters present a greater opportunity to intervene before a crisis stage has been reached. In the case of floods or conflict, while the reduction in caseloads may not be as pronounced, emergency preparedness measures such as evacuation plans and early warning should facilitate a decrease in loss of lives and assets.

The TEERR reports use the Household Economy Approach to model the reduction in caseloads that could occur with an early response to drought in Niger – i.e. before significant asset depletion has occurred. The modelling suggests that caseloads from early response to a high magnitude drought are 51% of the caseloads that would occur under a late response (Cabot Venton and Coulter, 2013).

Applying this potential reduction to the cost of response as a result of preparedness is not, however, straightforward. The Plan de Soutien provides an aggregate cost of response for all events. However, it is unlikely that this level of reduction could be achieved for rapid onset events such as floods and conflict – the reductions are likely to be much smaller, but data does not exist to quantify the likely reduction for these events. Given the data limitations, and given that the majority of the cost of response under the Plan de Soutien relates to drought, this reduction is applied to the cost of response under the Plan de Soutien. It is acknowledged that this will overstate the potential reduction.

With pre-planning, it was estimated that the average annual response cost to drought could be reduced to US\$193m per year. The evidence presented above suggests that this could be further reduced because less

people will require aid (caseloads are reduced). Applying a reduction in caseloads to the figure above, this suggests that humanitarian response costs would reduce even further to an average annual cost of US\$98m, a total reduction in humanitarian response costs of US\$119m<sup>19</sup>.

### Reduced losses

Emergency preparedness will reduce losses as, for instance, early warning and contingency planning can reduce lost lives, assets, and livelihoods. On the one hand, disaster losses are often the largest impact of an event, far outweighing humanitarian response costs. For example:

- An analysis of the 2013 floods (see Box 2) estimates that losses due to flooding were approximately six times the cost of the response (Republic of Niger, Prime Minister's Office, 2013).
- Evidence presented in the TEERR analysis suggests that losses can be 14 times the cost of the response in relation to droughts (Republic of Niger, Prime Minister's Office, 2013).
- Box 1 presents an example specific to locusts and whilst anecdotal, it provides a useful example of the escalation in costs and losses that can result from delayed action.

On the other hand, losses are very hard to estimate (the above examples do not reflect a systematic analysis

### Box 1. The cost of prevention: locusts

Since 1980, the average indicative losses in Niger due to locust outbreaks totalled US\$8.6m. Of the four less severe events, average losses were US\$1.95m. In 2004, approximately US\$11 million was spent in Niger to control a huge outbreak. The cost for the region was much higher, with an estimated US\$400 million spent to control the outbreak for all of the Sahel countries in 2004–2005, including some 13 million litres of (mostly organophosphate) pesticides. According to FAO/EMPRES and the Commission for Controlling the Desert Locust in the Western Region (CLCPRO) estimates, **this amount could have paid for the equivalent cost of 170 years of prevention activities.** Preventive measures are much cheaper. Niger currently spends approximately US\$400,000 annually on regular locust monitoring, detection, and early control.

Source: World Bank (2013).

<sup>18</sup> Applying the WFP Niger estimate, which indicates that pre-planning in response to drought could reduce aid costs to 89% of the estimated costs under a scenario without any pre-planning.

<sup>19</sup> Applying the estimate from the TEER report (which indicates that caseloads from an early response to a high magnitude drought are 51% of caseloads under a late response), to the annual average of the cost of humanitarian response, i.e. US\$193m, results in an average annual cost of US\$98 (i.e. 0.51 x US\$193m=US\$98m). Consequently, the difference between this result and the initial estimated average cost of response of US\$217m per year is US\$119 (i.e. US\$217m–US\$98m=US\$119m)

across the country for all hazards)<sup>20</sup>, and the reduction in losses that may come about through emergency preparedness are even harder to estimate.

Because data on decreases in losses with and without preparedness measures are not available with any certainty, this analysis looks at three potential scenarios (Table 3). Under the most conservative assumption, losses are estimated to reduce by 10%, a second scenario considers a 20% reduction in losses, and a third scenario a 30% reduction in losses. These percentages were chosen as illustrations, but are considered to be conservative.

Estimated average annualized losses due to crop production alone are US\$44m per year. Emergency preparedness activities have the potential to reduce these losses – for example, better early warning and contingency planning can allow farmers to harvest crops early, or ensure that grains are stored (and protected) in food stores. Reductions of losses are therefore estimated as shown in Table 3.

### Costs

The cost of emergency preparedness measures is described in the Plan de Soutien, and a Government of Niger flood risk management plan. In theory, there could be some overlap between these, though the description of activities suggests there is not:

- The Plan de Soutien includes emergency preparedness costs related to strengthening stockpiling capacity, risk prevention for locust outbreaks, strengthening national coordination, and strengthening information systems and monitoring and evaluation. 2013 costs are estimated at 6.96bn Communauté Financière d'Afrique (Financial Community of Africa, FCFA), or US\$14.1m (converted at time of writing).
- The Government's flood risk plan (Republic of Niger, Prime Ministers Office, 2013) includes emergency preparedness costs related to improving governance within the prevention and flooding management framework, developing an integrated multi-risk system for early warning and information, implementing sustainable mechanisms and prevention measures for flood risk management, and developing a communication strategy for behaviour change. 2013 costs are estimated at 50.18bn FCFA, US\$101.4m for three years, equivalent to US\$33.8m per year.

The total estimated cost of emergency preparedness is therefore US\$47.9m per year. It is not clear how many years this level of investment would be required for. The budget is for three years for the flood response measures

**Table 3. Estimated decrease in losses under conservative and less conservative scenarios**

Estimated reduction in losses	Value of reduction (US\$ millions)
10%	4
20%	8
30%	12

(which form the bulk of the costs), but clearly on-going investment including for support costs and upgrading infrastructure, will be required. Using a conservative assumption, this cost is extended to 10 years in the model, at which point it is reduced to 25% of the cost for operations and maintenance for the subsequent 10 years.

### Benefit to cost ratio

The costs and benefits outlined above have been entered into a 20-year model to estimate the costs of emergency preparedness, as compared with the benefits, which are monetized in terms of avoided costs of aid and avoided disaster losses.

Because of the number of assumptions required in the modelling, three scenarios were modelled, varying the assumptions around the absolute level of disaster losses, the potential reduction in disaster losses, and the discount rate.<sup>21</sup> Table 4 summarizes the three scenarios modelled, ranging from the most conservative to the least conservative assumptions.

**Table 4. Modelling scenarios**

Parameter	Scenario 1	Scenario 2	Scenario 3
Disaster losses	US\$44m – annualized crop losses	US\$88m – doubling of losses	US\$132m – tripling of losses
Reduction in losses	10% (US\$4m)	20% (US\$18m)	30% (US\$40m)
Discount rates	10%	5%	0%

The benefit to cost ratio for each of these scenarios is presented in Table 5.

The benefit to cost ratios are positive across all scenarios. In the most conservative scenario, it is estimated that

<sup>20</sup> With reference to floods and locusts, they are based on specific events and therefore cannot be generalized to other events of different magnitudes. The evidence from African Risk Capacity (ARC) in the TEERR report is generalized across six African nations.

<sup>21</sup> The discount rate is used to reflect the time value of money. In other words, a dollar today is considered more valuable than a dollar tomorrow, because it can be put towards productive purposes immediately. A 10% discount rate is typical for most development projects and is used here.

**Table 5. Benefit to cost ratio**

Scenario	Benefit to cost ratio (BCR)
Scenario 1	3.25
Scenario 2	4.00
Scenario 3	5.31

US\$3.25 of benefits are generated for every US\$1 spent, and this increases as high as US\$5.31 of benefit for every US\$1 spent. These findings clearly support further investments in emergency preparedness, as the benefits in terms of reduced caseloads and disaster losses far outweigh the costs.

### Cost effectiveness analysis

This section complements the cost–benefit analysis, but approaches the data from a different perspective – a cost effectiveness analysis. Cost effectiveness analysis assesses the cost of various measures to achieve a given outcome. However, in this analysis, the aim is not to weigh up different components of emergency preparedness; unlike other sectors, emergency preparedness measures are designed to work together holistically. In other words, it wouldn't be appropriate to invest in some measures and not others, as they are inter-related and work together. In the case of emergency preparedness, the objective is to reduce the cost of recovery per person (in other words the cost per person to return them to a pre-disaster state). This cost is compared for the counterfactual – late humanitarian response – and emergency preparedness.

#### Drought

The TEERR reports on Niger (referenced previously) conducted extensive modelling, based on probabilistic hazard assessments for drought, and also used the Household Economy Approach dataset of data on household level economies, and how they contract and expand in response to droughts. Using this dataset, it was possible to model the actual food deficit, as well as number of people affected, under high, medium and low magnitude droughts (defined using historic rainfall and terms of trade data).

TEERR found that the average cost of response per person under the counterfactual – late humanitarian response with no emergency preparedness – was between US\$92 and US\$106 per person. By comparison, under an early response, including the early procurement and pre-positioning of supplies, WFP estimated that the cost of humanitarian response would be US\$41 per person. Furthermore, the Household Economy Approach

### Box 2. The 2012 floods

A report from the Government of Niger outlines the cost of response, as well as estimated costs of preparedness, in relation to the 2012 floods (Republic of Niger, Prime Minister's Office 2013). Clearly, this is a specific example, but gives a sense of the magnitude of differences in the costs.

Following a severe rainy season, floodwaters in the capital Niamey and surrounding regions destroyed thousands of houses, heads of livestock and over 7,000 hectares of crops, leaving many of the country's poorest families without shelter or sustenance. The event affected an estimated 547,521 people among which 110,750 people lost their homes while 102 were killed. The emergency response to the 2012 floods was described as disorganised and inefficient due to a lack of clear direction for flood preparedness in the Plan de Soutien.

The cost of immediate response to the floods – i.e. food and non-food aid – was 14,914m FCFA. Furthermore, the cost to reconstruct damaged or destroyed infrastructure, and reinstate livelihoods, was estimated at 89,850m FCFA. The total cost and losses equate to 104,764m FCFA, or US\$213m.

By comparison, total project costs for an early warning system, building institutional capacity for better preparedness, as well as disaster risk reduction and prevention activities, for the same area affected by the floods, are estimated at 50,181m FCFA. Costs dedicated to the programme coordination unit are estimated at 290m FCFA. This equates to a total cost of 50,471m FCFA, or US\$102m for three years.

It is not clear to what degree the preparedness activities could reduce losses. However, the cost of preparedness is less than half that of the cost of response, in one event alone. Clearly the cost of preparedness would involve investing in infrastructure and capacities to deal with successive flood events (as well as building capacity for drought and conflict), and hence savings would multiply over time.

modelling estimated that caseloads would decrease by half, decreasing the cost of response to effectively US\$20 per person. These costs specifically relate to high and medium magnitude droughts, which have a return period of once every three years in Niger. The cost of humanitarian responses can therefore be divided by three to arrive at an average annualized cost of response. In summary, this implies an average annualized cost per person of between US\$30 and US\$35 under the counterfactual, as compared with US\$7 per person under early response/ emergency preparedness.

These figures purely refer to humanitarian response costs, and do not include losses. Clearly savings would also include a reduction in losses, though data in this regard is weak and therefore cannot be included in this analysis.

The cost of emergency preparedness, as contained in the Plan de Soutien, is between US\$12 and US\$21 per person per year. This needs to be invested every year, regardless of whether a drought takes place, to ensure that the systems and capacity are ready when a crisis strikes. As highlighted above, emergency preparedness does not eliminate the need for a humanitarian response, but does significantly reduce it. When the cost of emergency preparedness is combined with the residual need for humanitarian response, the total cost is between US\$19 and US\$28 per person per year. At the high end, this suggests that an emergency preparedness scenario would cost half that of a late humanitarian response. At the low end, costs of emergency preparedness are likely to be slightly lower than the counterfactual.

### Floods

The costs presented above only relate to droughts. The data available on floods is far more limited. The government assessment of the 2012 floods provides some useful data; however because this was a 1-in-100 year event the data does not offer a useful comparison with the cost of emergency preparedness, which can realise benefits in more frequently occurring floods.

The data on humanitarian response costs for drought is somewhat comparable to the response costs for flood. The unit costs are largely the same. The key difference is that relief in droughts is typically provided in a 6-month ration, whereas floods typically require a 3-month ration. We thus show an indicative estimate, with the cost of response halved to between US\$46 and US\$53 per person. The cost of response per person affected in the 2012 floods was US\$55 per person<sup>22</sup>, very much in line with these estimates.

Floods occur more or less every other year in Niger, but medium magnitude floods that require more consistent humanitarian response occur on average only once every five years.<sup>23</sup> This is used to annualize the estimated cost of the response.

Under early responses/emergency preparedness, costs would similarly reduce by approximately half, to between US\$23 and US\$27 per person. However, caseloads are less likely to decrease in a rapid onset event, as compared with a slow onset event, where there is significantly more lead time to act to reduce caseloads. Therefore it is assumed that caseloads under flooding are not affected by emergency preparedness/early responses.

<sup>22</sup> Total aid costs of approximately US\$30m divided by 547,000 affected people.

<sup>23</sup> Personal Communication, WFP, October 2013

**Table 6. Summary cost effectiveness analysis for droughts and floods**

	Cost per person affected	
	Droughts (US\$)	Floods (US\$)
<b>Counterfactual: late humanitarian response</b>		
a. Aid costs	92	46
b. Annualized	30	9
Late: total costs per person	30	9
<b>Emergency preparedness/early response</b>		
a. Aid costs	41	23
b. Adjusted for reduction in caseloads	20 <sup>24</sup>	23 <sup>25</sup>
c. Annualized	7	5
d. Cost of emergency preparedness	12–21	60
Early: Total cost per person (c+d)	19–28	65

The findings for droughts suggest that emergency preparedness is more cost effective than the counterfactual. With better data, these findings are only likely to increase:

- Many components of emergency preparedness for drought will also benefit households across a range of hazards. While each hazard type is different and requires different responses, activities such as pre-positioning and contingency planning can be used to benefit a range of hazard responses, and the development of skills such as evacuation, preparedness and first aid can be used by communities in a range of scenarios.
- Robust data on losses was not available; however, it is clear that losses, and the subsequent reduction of losses as a result of emergency preparedness, can have a significant impact that would further contribute to the cost effectiveness of emergency preparedness. For example, the ARC study (referenced earlier [Clarke and Vargas Hill, 2012]) estimates that the total losses from late humanitarian response to drought are US\$1,294 per household, or approximately US\$258 per person affected (assuming a household size of five).<sup>26</sup> Using a return period of 3 years, this equates to an annualized loss of US\$86. Under emergency preparedness/early responses, this figure reduces to US\$49 per household<sup>27</sup>, or just under US\$10 per person; annualized to US\$3 per person. If these figures are incorporated into the Cost Effectiveness Analysis presented above, the

<sup>24</sup> Reduction in caseloads in droughts estimated at 50%

<sup>25</sup> Reduction in caseloads in floods estimated at 0%

<sup>26</sup> This estimate includes reduced income potential of children under age 2 years (U2) who receive reduced nutrition, reduced household growth due to reduced consumption and increased distress sales, plus direct losses from livestock deaths.

cost of recovery per person under the counterfactual would equate to US\$116. By comparison, the cost under emergency preparedness would equate to US\$22–US\$31 per person, a saving of between US\$85 and US\$94 per person per year.

The findings for floods suggest that emergency preparedness is **not** more cost effective than the counterfactual. However, this is based on purely comparing aid costs with emergency preparedness costs; and emergency preparedness costs are estimated on the basis of the flood response plan for contingency measures for a 1-in-100 year flood and therefore are likely to be out of proportion to the kinds of measures necessary for a 1-in-5 year flood. Further to this, this analysis was not able to account for potential losses, as well as the avoided losses under emergency preparedness, which are likely to be significant.

### Elements for conducting a multi-criteria analysis

The purpose of this section is to highlight other potential decision metrics that can be used in the emergency preparedness investment process. A full multi-criteria analysis was not feasible here and a set of criteria is presented here that warrants consideration in the design of such an analysis. Importantly, quantitative metrics can only be used for those impacts that can be quantified, and there are important qualitative outcomes that need to be considered. Multi-criteria analysis (MCA) offers one approach for addressing multiple factors that need to be considered in any investment decision.<sup>28</sup>

The criteria and decision filters used in an MCA can be very wide ranging, and need to be decided as part of a multi-stakeholder process; to prioritize those that are most relevant and important to the local context. Scoring frameworks can also vary and can be highly subjective, thus a clear protocol needs to be determined as a result of a participatory process.

The MCA4Climate tool (UNEP 2011) produced by UNEP provides useful categories for consideration:

- *Inputs* – public financing needs, implementation barriers.
- *Outputs* – climate related, economic, environmental, social, and political/ institutional.

Each of these are then broken down into approximately 20 specific criteria.

In the case of emergency preparedness in Niger, some of the criteria that could be relevant for the design of emergency preparedness include the following:

- *Costs and benefits* – minimizing cost of inputs, while not compromising quality, and maximizing benefits.
- *Scalability* – how can the emergency preparedness system be designed to reach the most number of people?
- *Low regrets* – which components of the emergency preparedness system can be prioritized as low regrets measures, i.e. those components that will deliver benefits across a range of hazards that will yield the highest returns per dollar spent, and should be prioritized in the short term (though not to the exclusion of measures that may be more specific but are nonetheless essential components of a risk management strategy). The choice of ‘low regrets’ options will be particularly important within the context of the probabilistic nature of hazards. In other words, low regret options will help improve the response to a range of hazards of different magnitudes, rather than being designed to specific thresholds and/or hazard types.
- *Ease of implementation* – which aspects of the emergency preparedness plan will be easier to implement in the short term and which require more detailed assessment studies to determine viability and ensure that design is fit-for-purpose? Are there institutional or regulatory barriers that may affect some of the components of an effective emergency preparedness system that need to be addressed?
- *Environmental impact* – are there environmental considerations that need to be included in the decision making process? For example, do issues such as the siting of evacuation facilities need to go through an environmental impact assessment (EIA) process?

## Conclusions and recommendations

### Conclusions

*The analysis suggests that the benefits of investing in emergency preparedness outweigh the costs.*

The analysis clearly supports a financial imperative to shift to the greater funding of emergency preparedness in Niger. It identifies benefits of between US\$3.25 and US\$5.31 for every dollar spent on emergency preparedness. Results should however be interpreted with caution, as the analysis relied on detailed data for drought, but was lacking systematic data for other hazards. Having said this, the analysis relies on very conservative assumptions, and it is very likely that these figures will only strengthen with better data. When the data is viewed from a cost effectiveness perspective, the findings also suggest that the cost of recovery per person is lower under an emergency preparedness scenario for drought. More data would be required to expand upon this analysis in order to incorporate multiple hazards.

<sup>27</sup> This is the cost of reduced nutrition for under-2s losing 14% of their lifetime earnings.

<sup>28</sup> Please refer to Mechler (2012), which forms a part of this series of papers, for more detail on various MCA methodologies and their application.

The implementation of an effective emergency preparedness plan will require the consideration of a range of quantifiable and non-quantifiable criteria.

The multi-criteria analysis built on the quantitative analysis to identify other criteria that also need to be considered in the design of an emergency preparedness system for Niger. For example, important criteria could include the identification and prioritization of no/low regrets emergency preparedness measures that would likely bring benefits at scale, and within a multi-hazard context; the identification of any institutional or regulatory barriers to emergency preparedness; and environmental considerations in implementing emergency preparedness components that may require further studies.

*The effectiveness of an emergency preparedness plan will depend on the degree to which these various criteria are properly assessed and incorporated.*

For example, while the quantitative analysis suggests that emergency preparedness is more cost effective than the current approach, this conclusion relies heavily upon the assumption that emergency preparedness measures will be fit-for-purpose and hence effective at delivering gains. An emergency preparedness plan that is not carefully designed, or does not account for the various criteria listed above, may fail to deliver outcomes, and hence ultimately be more expensive than business as usual. Similarly, the analysis does not necessarily suggest that large amounts of money should be invested in emergency preparedness. All investments need to be considered both in light of their costs as well as the benefits that can be realised. The efficient use of funding is essential.

## Recommendations

### 1. The findings provide indicative evidence that there is a clear financial imperative for greater investment in effective emergency preparedness in Niger.

The monetary benefits of investing in preparedness in relation to drought – assuming that it is implemented in a way that delivers the expected gains – clearly outweigh the costs. This suggests a clear fiduciary duty on the part of donors and the Government of Niger to focus more results on emergency preparedness.

### 2. Strengthen the Plan de Soutien to incorporate a full suite of hazards and appropriate response measures.

The plan provides a strong first step towards addressing a major component of hazard risk in Niger, namely food security. It could be usefully used as a platform to expand emergency preparedness in Niger to address

other concerns relevant to a range of hazards; thus better reflecting the risk context of the country.

### 3. Build evidence to refine and deepen the analysis undertaken in this study.

This study was only able to investigate readily available data sources. The most relevant and detailed data available were in relation to drought, developed in the TEERR series of reports referenced above. This analysis allowed for a significant level of depth to the analysis presented here. However, similar data was not so prevalent relating to floods, political insecurity, and other hazards. As a result, the following specific recommendations are made to build on the existing analysis:

#### 3.1 Data on emergency preparedness spending:

- Not only is this data weak, but there is no clear indication as to whether the scheduled spend in either the Plan de Soutien or the flood risk management plan is sufficient to lead to savings and reduced losses. A programme appraisal process, that scopes the full cost of a functioning multi-hazard emergency preparedness system, with both fixed and variable costs over time, would greatly benefit the understanding of the resources that are required.
- This analysis could usefully include an assessment of which aspects of emergency preparedness are better funded than others, and by whom? Do donors prefer investing in stockpiling over strengthening information systems? Does the government have specific preparedness 'favourites'? If so, why? Answering these questions will help to map key funding areas against likely sources of funding, as well as identify gaps.
- The distribution of emergency preparedness spending between government, donors, NGOs, and private sector. Who is investing in emergency preparedness and who realises the benefit?

#### 3.2 Data on the benefits of emergency preparedness:

- There is very little evidence on the potential returns to emergency preparedness. Better historical data collection on the magnitude of crisis events, the associated losses, and estimated losses as a result of emergency preparedness would be helpful; although it is acknowledged that it is very challenging to collect such data.
- Along similar lines, data on losses from hazard events, and the potential for reducing losses as a result of emergency preparedness, is lacking. The World Bank and others often report on disaster losses in specific countries, presenting data on losses across different sectors of the economy, and as a percentage of GDP. Such a study would greatly enhance this analysis, particularly as losses can be such a significant component of disaster impacts that can subsequently be mitigated by emergency preparedness.

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## Annex 1. Breakdown of spending in the Plan de Soutien

	FCFA	USD
<b>Costs related to early preparedness</b>		
A17	4,200,000,000	8,485,344
A18	1,500,000,000	3,030,480
A19	125,981,024	254,522
A20	377,943,072	763,566
A21	755,886,144	1,527,132
<b>Total</b>	<b>6,959,810,240</b> B 6.96 CFCA	<b>14,061,044</b> \$M 14.06
<b>Cost of response</b>		
A1	39,899,632,500	80,610,026
A2	3,038,328,000	6,138,395
A3	1,494,000,000	3,018,358
A4	1,500,000,000	3,030,480
A5	11,155,740,000	22,538,165
A6	15,813,902,000	31,949,142
A7	4,969,608,000	10,040,198
A8	39,475,112,500	79,752,359
A9	366,124,000	739,688
A10	430,000,000	868,738
A11	589,875,000	1,191,736
A12	7,000,000,000	14,142,240
A13	3,750,000,000	7,576,200
A14	2,500,000,000	5,050,800
A15	33,252,000,000	67,179,680.64
A16	5,100,000,000	10,303,632
<b>Total</b>	<b>170,334,322,000</b> B 170.33 CFCA	<b>344,129,837</b> M\$ 344.13

# Financing of emergency preparedness in Nepal

Glyn Taylor

## Introduction

The Nepal Risk Reduction Consortium (NRRC) was formed in May 2009 to support the Government of Nepal, specifically its National Strategy for Disaster Risk Management (NSDRM)<sup>1</sup>. The founding members of the Consortium were the Asian Development Bank (ADB), the International Federation of the Red Cross and Red Crescent Societies (IFRC), the United Nations Development Programme (UNDP), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the UN International Strategy for Disaster Reduction (ISDR) and the World Bank. The Government of Nepal (GoN) participated in the inaugural meeting of the NRRC, and supported the initiative from its inception.

The NRRC has generated considerable national and international interest. The Flagship programmes incorporate ongoing activities in the majority of Nepal's 75 districts. The NRRC has also supported the mobilisation of significant donor resources, both technical and financial. While the establishment of the NRRC is rooted in the absence of formal national policy and structures to address these issues, it embodies the commitment of the Government of Nepal and the international community to mitigate the high disaster risks facing the country. The GoN commissioned a review (Taylor et al., 2013) of the NRRC in 2013 (referred to hereafter as 'the NRRC review'), which is the source document for this paper.

The NRRC was launched with the following objectives:

- To support the Government of Nepal in addressing the short-to-medium-term disaster risk-reduction (DRR) priorities, as identified by the National Strategy for Disaster Risk Management (approved October 2009).
- To provide a platform for action through which a number of international agencies can partner with the Government of Nepal and civil society organisations in achieving the DRR priorities.

To raise financial resources and organise technical assistance for DRR by highlighting the importance of these

priorities for Nepal, as well as the innovation that the NRRC represents.

The NRRC was built around five programmes, arranged thematically and known as Flagships. The five Flagship areas were set out on the basis of Government priorities, patterns of risk and vulnerability in Nepal, and the ongoing programmes of consortium members. The Flagships were organised around specific functional areas of risk reduction, preparedness and capacity building in DRR.<sup>2</sup> They cover a range of DRR-related governance reforms, structural and non-structural mitigation measures, enhancing preparedness and response capacities across government and international humanitarian actors for major disasters, and improving response and early warning capacities at the community level. Each of the Flagship programmes has a 'joint programme', broken down by outcomes, activities and results, with each activity set listed by implementing partner. Each set of activities has a budget, and, as such, each Flagship has an overall cost<sup>3</sup>.

Each Flagship, therefore, contains components on disaster preparedness, as well as elements of broader risk reduction. Flagship 2 is badged as the focal area for emergency preparedness and response capacity and has the broadest range of activities related to disaster planning across governmental and international systems, including clusters, national and international militaries and civil protection. From the perspective of replication, Flagship 2 is also important, as it is the focus of interaction between the government, international development partners and the international humanitarian system.

**NRRC structures:** For each Flagship, the lead role is designated to a government ministry, and an international agency is assigned as coordinator in support of the lead Government agency (see Table 1). The Flagship lead ministry and coordinator roles have not yet been given specific terms of reference and the coordinator function is undertaken on a deliberately voluntary basis.<sup>4</sup> NRRC Flagship leads report to a Steering Committee, which is

<sup>1</sup> The NSDRM and NRRC structures are distinct from the UNDAF, but there are overlaps. The NRRC Flagships strive to complement rather than duplicate existing development structures. A recent example is the combination of Flagship 1 schools coordination with the health SWAP thematic meeting on structural safety in health institutions.

<sup>2</sup> The NSDRM does not specifically address climate change adaptation.

<sup>3</sup> A full list of programmes is available in the NRRC Flagship Programmes document, which is available at <http://www.flagship2.nrrc.org.np/nepal-risk-reduction-consortium-flagship-programmes>

<sup>4</sup> This was originally seen as the only way to ensure commitment from a range of agencies with different cultures.

**Table 1. Details of the five flagship programmes**

	Theme	Flagship leads/coordinators	Intervention areas and key activities
<b>Flagship 1</b>	School and hospital safety	Schools: Ministry of Education/ Asian Development Bank Hospitals: Ministry of Health/World Health Organization	<ul style="list-style-type: none"> <li>• The seismic retrofitting of school and key hospital buildings (initial focus on the Kathmandu Valley)</li> <li>• Associated non-physical work (awareness raising, training, emergency staffing plans).</li> </ul>
<b>Flagship 2</b>	Emergency preparedness and response capacity	Ministry of Home Affairs (MoHA)/ OCHA <sup>5</sup>	<ul style="list-style-type: none"> <li>• Building the institutional capacity of first responders (e.g. strengthening national urban search and rescue [USAR] capacity)</li> <li>• Disaster response and information management planning</li> <li>• Warehousing and stockpiling for pre-positioning stocks and non-food items for emergency response</li> <li>• Strengthening preparedness for the facilitation of international assistance.</li> </ul>
<b>Flagship 3</b>	Flood management in the Kosi River basin	Department of Water Induced Disaster Prevention (DWIDP) focusing on the structural components and Department of Hydrology and Meteorology (DHM)/ the World Bank	<ul style="list-style-type: none"> <li>• Flood risk assessment</li> <li>• Structural measures for flood mitigation</li> <li>• Non-structural measures for flood mitigation</li> <li>• Flood forecasting and early warning systems</li> <li>• Institutional capacity-building.</li> </ul>
<b>Flagship 4</b>	Integrated community-based disaster risk reduction/management	Ministry of Federal Affairs and Local Development (MoFALD)/IFRC	<ul style="list-style-type: none"> <li>• Develop common tools and approaches for DRM projects</li> <li>• Selecting 1,000 of the most vulnerable village development committees (VDCs) in Nepal</li> <li>• Identifying the most vulnerable 30 communities within each VDC</li> <li>• Undertaking a vulnerability and capacity assessment (VCA) in identified communities;</li> <li>• Developing VDC-level DRM plans.</li> </ul>
<b>Flagship 5</b>	Policy and institutional support for disaster risk management	Ministry of Home Affairs/UNDP	<ul style="list-style-type: none"> <li>• Policy and legal reform that supports the formation of new policies</li> <li>• Drafting new as well as revising existing legislation.</li> <li>• Implementing a national DRM plan that is responsive to Hyogo Framework for Action (HFA) priorities</li> <li>• Developing and implementing sectoral policies embracing DRM</li> <li>• Institutional reform</li> <li>• Knowledge management sharing</li> <li>• Building code implementation</li> <li>• Risk sensitive land use planning (particularly for the Kathmandu Valley)</li> <li>• disaster budgeting or financing for pro-active risk management and reduction;</li> <li>• National platform building.</li> </ul>

an inter-ministerial and consortium body established to provide vision, strategic guidance and technical support to Nepal's NSDRM. The Steering Committee is designed to address these functions in the interim period until the National Disaster Management Authority (NDMA) can

be formulated under the pending Disaster Management Act. The committee is chaired at a senior level (secretary level) by MoHA. The NRRC Secretariat was formulated to provide technical and advisory support to the Steering Committee. It functions under the direction of the Steering Committee, and works closely with consortium focal points for the development and coordination of Flagship programme activities.

<sup>5</sup> OCHA will scale down to one national staff member by the end of 2013 and a new Flagship lead will need to be appointed.

**NRRC priorities:** The selection of NRRC priorities was not linked to a single specific risk assessment of natural hazards and possible impacts, but was informed by the NSDRM (which is itself based on existing risk assessments). The formulation of priorities was also acknowledged to be motivated by the desire to have the Flagship programmes coordinated by influential partners in both development and humanitarian issues. There was also a strong desire to avoid conflicts of interest inherent in other models where key operational agencies are both 'lead' and 'implementer' in the same pillar i.e. competing for funds through mechanisms which they can influence<sup>6</sup>. The early proceedings of the NRRC were clearly influenced by two specific risks; seismic risk and flood risk. Kathmandu valley is the most 'at-risk city in the world' (NRRC, 2012) to a major earthquake, and it is recognised that a significant earthquake could lead to the paralysis of critical infrastructure, enormous human and economic losses, and would create extraordinary challenges for the launch of a disaster response. Although the NRRC pre-dates the devastating earthquake in Haiti in 2010, the event provided significant momentum for the NRRC's formal international launch in 2011. Nepal was also badly affected by flooding in the Kosi river basin in 2008. Seismic and flood risk are nationwide issues and landslides occur throughout the country in most monsoon seasons.

## The consortium and emergency preparedness

### Preparedness areas and categories

Table 2 shows the preparedness 'areas' and 'categories' covered under the Flagship programmes. In order to provide a comparison, the columns shaded in green represent areas covered by each of the humanitarian financing instruments and the consolidated appeal process (CAP). Clearly, as a consortium that brings the humanitarian and development communities together with government in a coordination system designed to support the Hyogo Framework, the spread of activities is wide.

As noted above, the NNRC Flagships are made up a set of priorities for funding<sup>7</sup>, similar in some ways to a CAP or UNDAF. As with either appeal – that the activities are represented in Table 2 is not an indicator that funding has been raised for them, nor that positive outcomes have been achieved.

## Lessons from the consortium's first five years

The NNRC review (Taylor et al., 2013) has a full set of finding and recommendations. Overall, the review found that the NRRC is an innovative structure that brings together a range of important actors and retains attention on the key issue of risk reduction in Nepal. As a platform for action and operational coordination, the results were said to be varied although it had to be acknowledged that the NRRC represents a new way of joint working for a number of institutions, and that such arrangements can take time to full establish. The review found that different sets of actors looked to the NRRC to provide what they perceived as lacking from their own standpoint: i.e. donors looked to Flagship leads and the Steering Committee in particular to provide strategy and vision for risk reduction, whilst operational entities (NGOs in particular) looked to the Flagship leads to provide practical, operational coordination. Although both have been slow to materialize, with the exception of Flagship 4, there are clear signs of progress in the other Flagship areas. Findings which relate most closely to the potential replication of the mechanism are summarized briefly below:

**Government:** Against a backdrop of exceptional vulnerability to multiple hazards, the low capacity of government in this area and the lack of formal structures and legislation for disaster risk, were key determinants for the decision to introduce external support. Moreover, after nearly two decades of political instability, risk reduction was seen as one area around which political consensus could be built. To varying degrees the government leads have clearly turned their attention to issues of risk reduction. In general, partners to the NRRC feel that while the issue has been embraced by government, it has not penetrated as far as national budgeting processes. The high turnover of staff in government posts is a common feature across sectors and the NRRC has not been immune from it.

**International leadership:** The incumbent UN resident coordinator/humanitarian coordinator (UN RCHC) was able to provide a vision (as the representative of the whole UN system, including ISDR) around which an impressive array of international agencies could rally. With the backing of the government from its inception, the NRRC was bolstered further when three important donors – the European Commission (DIPECHO), UK and the US – extended significant financial and vocal support to the consortium.

**International system:** The NRRC is unquestionably an innovative framework, notably in the way it holds together diverse sets of actors who are unaccustomed to collaborating. On the government side, this includes line ministries and departments. From the perspective of international aid architecture, the NRRC sits astride

<sup>6</sup> There is a live debate looking at the possibility of using the World Food Programme (WFP), UNICEF or UNDP for the new lead of Flagship 2. None of these options is recommended by the review.

<sup>7</sup> No specific priorities are set within the Flagships' range of activities, however.

**Table 2. Preparedness ‘areas’ and ‘categories’ covered under the Flagship programmes**

Preparedness matrix: categories of emergency preparedness	ERF	CHF	CERF	CAP	NRRC
<b>Hazard/risk analysis and early warning</b>					
Early warning systems	Dark Green	Light Green	White	Yellow	Red
Hazard/risk analysis	White	White	Light Green	Yellow	Red
<b>Institutional and legislative frameworks</b>					
Institutional and legislative frameworks, resource allocation and funding mechanisms	White	White	White	Yellow	Red
National plan of action, national platform, national disaster management authority	Dark Green	White	White	White	Red
Regional agreements	White	White	White	White	White
International agreements	White	White	White	White	White
<b>Resource allocation and funding</b>					
National and regional risk pooling mechanisms	White	White	White	White	White
International agency emergency funding arrangements – including risk pooling mechanisms (external) and core emergency programme budgets (internal)	White	White	White	White	Red
<b>Coordination</b>					
Government coordination mechanisms	White	White	White	White	Red
National and sub-national leadership structures	White	White	White	White	Red
Inter-agency coordination – national and sub-national	White	White	White	Yellow	Red
Cluster- and sector-established contextual standards	White	White	White	White	Red
<b>Information management and communication</b>					
Information management systems – national, regional and international	White	White	White	White	Red
Communication systems	White	Light Green	White	White	Red
Cluster and sector information management systems – GIS, 3/4Ws	White	White	White	White	Red
<b>Contingency/preparedness and response planning</b>					
Community preparedness	Dark Green	Light Green	Light Green	Yellow	Red
Contingency/preparedness and response planning	Dark Green	Light Green	Light Green	Yellow	Red
<b>Training and exercises</b>					
Simulations, drills – with the presence of national and/or international actors	Dark Green	White	White	White	Red
Accredited training opportunities	White	White	White	White	Red
Specific country context training opportunities	Dark Green	Light Green	Light Green	Yellow	Red
<b>Emergency services/standby arrangements</b>					
Stockpiling – national, regional and international	Dark Green	Light Green	Light Green	Yellow	Red
Civil protection, emergency services <sup>8</sup> , search and rescue	Dark Green	White	White	White	Red

the challenging gap between humanitarian and development architectures. Although development is clearly the dominant paradigm, the NRRC holds the structural ‘tension’ between the priorities of the government, development and humanitarian partners. It has required humanitarian actors in the system to consider:

- how to operate in a manner that complements development norms
- the need for sustainability in programming

- costs that are palatable to government budgeting
- programme objectives and change along longer timeframes; and
- perhaps above all, the need to work with and through the government.

<sup>8</sup> Services’ here goes beyond fire engines and ambulances to cover being prepared to provide many other services, for example, mobile health teams to cover displaced populations, emergency water supply, and psycho-social support.

Similarly, it has required development actors to consider programming with a humanitarian mind-set: targeting and prioritising according to risk and the humanitarian imperative, as well as the need to collapse normal development timeframes for project development and completion.

The NRRC came into being in post-conflict Nepal. The international system has supported Nepal according to a typical model and has progressed along a familiar trajectory. The CAP has given way to the UNDAF as the main appeal mechanism. Clusters established and strengthened during the conflict and the Kosi flood response have been handed over to government leads (MoHA in the absence of an NDMA). OCHA's direct co-ordination function has been handed over to the government, with the support of UNDP through its CDRMP programme, which continues to build capacity in legislation. OCHA is due to revert to its normal model of support for preparedness from its regional office.

Clearly a key question for replication in other contexts could be *"in countries with exceptionally high vulnerability to risk, is this support model adequate?"* In the right context, the NRRC model does appear to add significant value. The NRRC Flagships bring together elements of humanitarian and development programming in ways that are specifically complementary. As such, the Flagship programmes receive funding from various funding streams, humanitarian, developmental, and specialist funds for climate change adaptation and risk reduction. Whilst there was no specific analysis of funding flows for the review, it is possible to make some observations: despite the central and prominent role played by Government in the NRRC, donors recognise the lack of current capacity in government and, for considerations of fiduciary risk, channel a high proportion of funding for DRR through external channels. The lack of funding for some of the more obviously 'humanitarian' parts of Flagship 2 (such as emergency warehousing) was felt by some to reflect an overly rapid shift in donors away from emergency channels.

**Operational coordination:** The NRRC set out, as one of its numerous objectives, to be a 'platform for action'. Although the Flagship structure, with nominated coordination agencies, appears similar to the humanitarian cluster system, there are significant differences. Although the presence of government as the Flagship lead is more prominent than the cluster system, the relationship between the 'leads' and coordinators' is asymmetrical, in that the international coordinators tend to be able to call upon a greater depth of human resources, information technology and other support.

The Flagship coordination position is deliberately voluntary and has had no terms of reference to date. The use of ADB and the World Bank in Flagship-coordination

roles (Flagships 1 and 3) was important in terms of harnessing their influence with the government and their capacity to launch investment in large infrastructure. Institutionally, however, they are less accustomed to operating as coordinating bodies for governmental and non-governmental agencies. Only Flagship 4 has a dedicated staff member in the Flagship Coordinator position (funded by a key donor and housed in IFRC). Arguably the original leadership of Flagship 4 has done a better job in creating a more clearly defined and coherent set of goals than the other Flagships; nonetheless it has seen considerably more success in bringing together operational actors around a jointly constructed action plan, and creating an information management platform.

At the outset of the NRRC, OCHA was in a position to take on the coordination role in Flagship 2, the focus for emergency preparedness. This key role was effectively used as a brake on OCHA's withdrawal by the previous UN RCHC, but by the end of 2013, OCHA will have withdrawn its full complement of international staff and continue to support from its regional office. A clear lesson here for the international system is that no matter how clearly defined the role, or how clearly defined the risk and vulnerability, emergency preparedness is not sufficient to keep a full OCHA office in any given country.<sup>9</sup> OCHA does not have the institutional capacity to play an ongoing support role to government in disaster preparedness in every country. In most cases, UNDP takes over support to nascent government systems. In effect, the NRRC model shows that in the context of Nepal, where UNDP already has a full and active engagement, there are additional roles to be played:

- Coordinating the planning of an international disaster response with government.
- Building capacity in Nepali civil protection agencies.
- In the specific context of Flagship 2, coordinating this important pillar.

## Replicating the consortium

Summarising the key issues above, the following might be considered as characteristics of a context which might support the replication of such a model:

- **High disaster risk:** A context that justifies a heavier focus on DRR and emergency preparedness than is offered by the standard support model (i.e. that the standard level of support offered by UNDP is required, but that UNDP cannot provide all required functions).
- **Viable conditions for development assistance:** The NRRC could not exist in its current form if humanitarian

<sup>9</sup> By the end of 2013 OCHA will have finished the process of handing over the clusters to government leads (albeit supported in some cases). Cluster coordination is ongoing in most cases and focused specifically on emergency planning or response.

assistance was the primary delivery channel. Under such circumstances, a relatively narrow range of risk reduction programmes would be tenable. The NRRC works fully in support of government and requires a solid and positive relationship.

- **A supportive government and one that acknowledges the need for assistance in DRR and emergency preparedness:** Clearly for such a consortium to be built, the relationship between the international system in broad terms and the host government needs to be positive (i.e. conditions conducive to normal development assistance). In a context of exceptionally high disaster risk, but with legislation and an NDMA or similar structure in place, it seems less likely that there would be broad ranging support for such a structure. In its current configuration, it is hard to envisage an NRRC type consortium in a conflict context.
- **Strong leadership in key international positions:** Paradoxically, while there need to be viable conditions for development assistance, there also needs to be clear awareness of risk and competence in humanitarian issues within international leadership.
- **Strong donor support.**

## Relevance to the five case studies

Research would be required on each country case to consider the suitability of an NRRC type consortium. In particular, the critical details of the relationship between the international system and governments, the strength of UN leadership and the specific importance placed on preparedness by donors are unclear. However, from the data on instruments and funding presented Kellett and Peters (2014), and the criteria suggested above, the following suggestions are possible:

- Sudan immediately appears as the weakest candidate. The ongoing dominance of humanitarian assistance and instruments (CAP and the Common Humanitarian Fund (CHF)) and localised conflicts undermining current preparedness efforts seem to indicate that the environment would not be conducive.
- The Myanmar Action Plan on Disaster Risk Reduction (MAPDRR) appears, and the Department for Relief and Reconstruction appear, at face value to provide a platform for engagement (in a similar way to the NSDRM in Nepal). Although humanitarian assistance dominates, it appears that the environment for development assistance is conducive and increasingly so. The DIPECHO programme and other initiatives indicate that donor support for preparedness and risk reduction are more broadly in place. Whether or not the environment exists for a donor to champion preparedness in this context is unclear.
- Haiti is obviously associated with its recent mega-disaster and its ongoing repercussions. Again,

humanitarian and development architectures are present, as well as a multitude of funding channels. Whilst many of the conditions would appear to be in place, there appears to be a crowded aid environment, with many assistance actors working at full capacity. There is a noted lack of cohesion amongst donors and on the issue of preparedness and a lack of willingness to engage with government. Whilst the risk environment obviously exists, it does not seem at first glance that another aid initiative would stand out from the crowd.

- Niger is characterised by cyclical food security related crises that require humanitarian and development support. Humanitarian systems have scaled up in response to the most recent cycle. Again at face value, it appears that coordinated systems have been put in place, specifically for the risk profile in Niger, notably the Dispositif National de Prévention et Gestion des Crises Alimentaires du Niger (DNP-GCA) ('the Dispositif'). The Dispositif is noted to be a comprehensive government mechanism for dealing with food security and has key partners on board. The NRRC bring together partners around multiple hazards, including planning for a mega disaster requiring the intervention, for example, of foreign military assets. On balance, the situation in Niger does not appear to warrant such a broad platform. The added value of any NRRC-like structure would need to be very carefully considered.
- In the Philippines, in contrast to Nepal, legislation (in the form of the Philippine Disaster Risk Reduction and Management Act of 2010), structures and national budgeting appear to be in place. Humanitarian funding has been granted, largely via repeated flash appeals and central emergency response fund (CERF) grants for unforeseen events. In what is described as a fairly 'positive' environment for DRR, the need for an additional structure is unclear. In a context where progress appears to be being made in developmental terms, however, it seems unlikely that such a concentrated level of external support would be deemed necessary.

Although, the NRRC has had a mixed review in terms of achievements to date, its ambitions should be viewed in the long as well as short term and the model has many potential strengths. In developmental terms, disaster risk is tackled in part by very substantial investment in infrastructure. Although the World Bank and ADB may not have been the most likely partners for building consensus and strategy with non-government actors, the NRRC serves to retain their engagement with government on the issue as well as their commitment to action.<sup>10</sup> Similarly, the NRRC model is likely to sustain UNDP's focus on

<sup>10</sup> Impact will only be evident in the coming years, as the international financing institutions (IFS) and donors develop their new long term country strategies.

strengthening legislation, government systems and capacity and moreover, the model places an unusually high bar for UNDP in its expectations of transparency and collaboration.

At the humanitarian end of the DRR spectrum, the model (specifically Flagship 2) highlights the potential for an extended OCHA-like function in the coordination of planning for large scale disaster response, specifically ensuring that international and national plans are harmonious. The five short outlines in Table 1 fall well short of a basis of discussion for potential replication of the model. The NRRC began in a specific context of high disaster risk and provided a catalytic theme for government and key actors. The 'ideal' conditions for replication should continue to be a focus, and equally, the results of the experiment should continue to be evaluated.

## References

**Kellett, J., and Peters, K. (2014)** *Dare to Prepare: Taking Risk Seriously*. London: Overseas Development Institute.

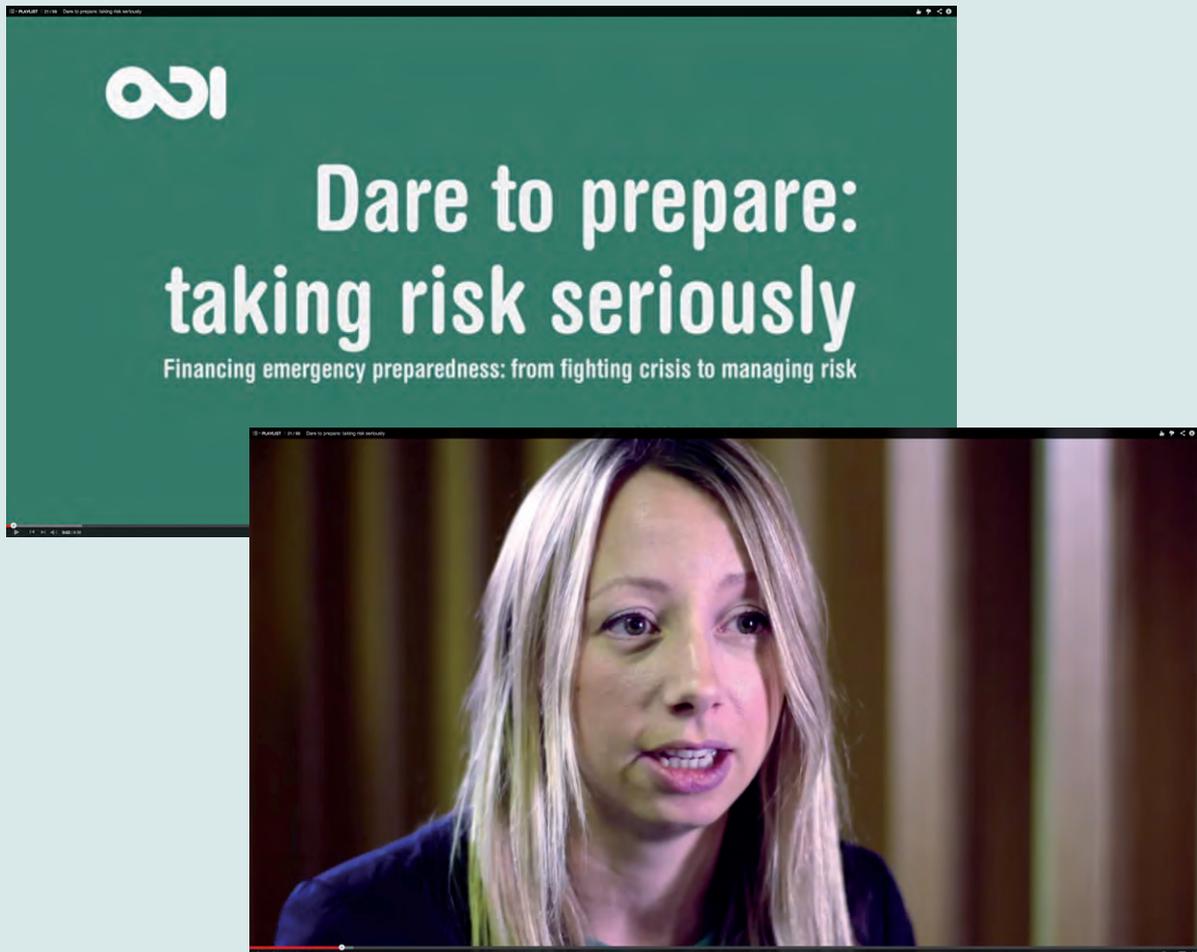
**Taylor, G., Vatsa K., et al. (2013)** *Review of the Nepal Risk Reduction Consortium (NRRC) – Final Report* (August 2013).

**NRRC (2012)** *Nepal Risk Reduction Consortium, Flagship Programmes Document*. Kathmandu: Nepal Risk Reduction Consortium.

# Communication materials

# Video: Dare to prepare: taking risk seriously

Video length: 8.30 minutes



## Description

Humanitarians, development workers and researchers share their experiences of successes and failures in emergency preparedness. With stories from Sudan, Burkina Faso, Mozambique and the Sahel, real life experiences show how the current financing architecture influences and shapes action on the ground. Commentary is provided by one of the report authors, Katie Peters, who makes suggestions on how to transform the current financing architecture for the better.

Available from the ODI website: <http://www.odi.org.uk/publications/7955-dare-prepare-taking-risk-seriously>

Also available from YouTube: <http://www.youtube.com/watch?v=avfCU4xGNjk>

Thanks go to:

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Directed and produced by: Catherine Allinson and Petra Tiziani

# OpEd: Typhoon Haiyan is a call to action: Risk must be the heart of development

An opinion piece written by Sandra Aviles, Katie Peters and Jan Kellet can be found at:  
<http://theglobaljournal.net/group/digital-news/article/1153/>



The screenshot shows a webpage from 'GLOBAL MINDS' with the following content:

- Header:** GLOBAL MINDS logo, navigation menu (SUBSCRIBE, GLOBAL MINDS, REVIEWS, IN THE MAGAZINE, TOPICS, GLOBAL+5, NGO NEXUS, TOP 100 NGOs), and social media links.
- Section Header:** 'GLOBAL MINDS' followed by 'Haiyan Is A Call To Action: Risk Must Be The Heart of Development'.
- Image:** A photograph showing a person sitting amidst the wreckage of a destroyed building after a typhoon.
- Text:**

Once more a disaster is centre-stage and slowly, as before, attention shifts from the challenge of response to the failure to prevent.

The destruction wrought by typhoon Haiyan has yet to be fully understood, and the total cost, in terms of shattered lives and financial loss, can still only be imagined. What we know is that Haiyan, one of the **strongest storms on record**, and the storm surge created by the funneling of water in Leyte Gulf, has created a level of devastating impact usually reserved for tsunamis. **Before and after photographs** are similar to those we saw in Aceh after the 2004 Indian-Ocean tsunami, villages wiped from the landscape, cargo ships piled up along the coastline.

That this has happened in the Philippines is somewhat perverse. Disaster risk is built into the country's development planning, and considered as a threat to national security. Politicians better have disaster prominence in their manifesto if they want to be elected. The government is investing heavily in risk reduction, close to \$1 billion a year. And, perhaps more important, disaster risk has entered civil consciousness; prevention and preparing for the regular impact of typhoons, landslides, flooding and earthquakes is of central importance across society.
- Tags:** Disaster, Disaster Response, Disaster Risk Reduction, FAO, Haiyan, Jan Kellet, Katie Peters, ODI, Sandra Aviles, The Philippines
- Groups:** Global Minds, Public Health and Interventions, Politics of Development and Humanitarian Aid

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