BRIEFING PAPER

DISASTER RISK REDUCTION

Spending where it should count

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INTRODUCTION

The humanitarian system is under considerable strain. Needs are increasing, and commodity prices remain at near-record highs. There is pressure on donors either to reduce their humanitarian expenditures or at the very least, more than before, to justify the value in each dollar spent. This is in a context of mega-disasters on an almost unheard of scale and continual expenditures of vast sums in complex emergencies. There are considerable concerns about whether or not the current trend of year on year increases in humanitarian funding can be sustained.

Disaster risk reduction (DRR) is seen by many as a means not only to reduce this continued pressure on humanitarian expenditures but also to protect development investments made by both the international community and national governments – and, of course, to reduce the effects that disasters have on families, communities and countries.

These effects, and the scale of the damage caused by natural disasters, cannot be underestimated. Over the ten years from 2000 to 2009, more than 2.2 billion people worldwide were affected by 4,484 natural disasters. These disasters killed close to 840,000 people and cost at least US$891 billion in economic damage.

In this report we examine the top 40 humanitarian recipient countries in the context of natural disasters and especially with regard to financing to reduce risk. We highlight how prevalent disasters are in these countries, and their particularly significant impact. Beyond this, we examine the current state of funding for DRR and, in the context of those countries most at risk of natural disaster, ask questions about the volume and type of funding, and its equity. Are the right choices being made?

CONTENTS

THE BIG NUMBERS
DISASTER RISK REDUCTION
IN THE TOP 40 HUMANITARIAN RECIPIENTS, 2000–2009

IMPACT

847.5 MILLION
AFFECTED POPULATION

595,783
POPULATION KILLED

US$74 BILLION
ECONOMIC DAMAGE

1,472
NUMBER OF DISASTERS

INTERNATIONAL ASSISTANCE

US$9.3 billion of US$10.1 billion of humanitarian aid to the top 40 recipients in 2009; US$9 out of every US$10

US$363 billion of US$1,229 billion of development aid to the top 40 humanitarian recipients; US$3 out of every US$10

INTERNATIONAL DRR FUNDING

US$3.7 billion for DRR out of US$363 billion development aid, to the top 40 humanitarian recipients

Therefore 1% of all development aid is DRR; US$1 out of every US$100 spent on aid is for reducing disaster risk

Four countries alone account for 75% of all DRR – US$2.8 billion of the US$3.7 billion

In 2009, 68% of DRR financing came from humanitarian funds

DRR AND EQUITY

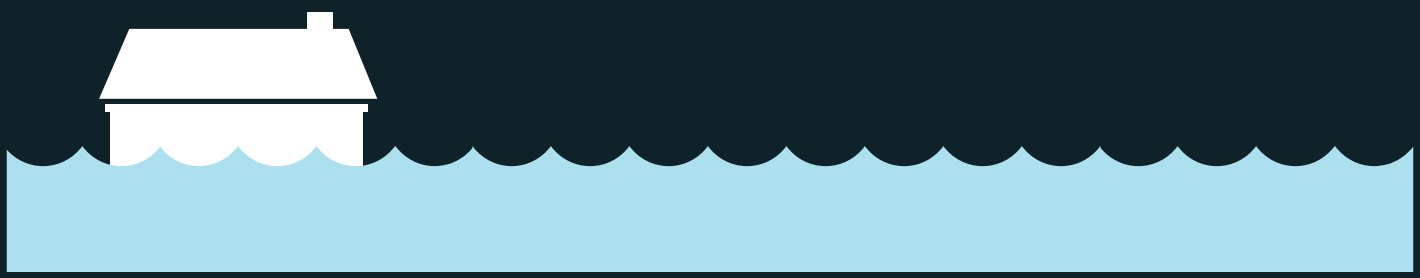
Five countries received more than US$5 per person in DRR over the decade

Twenty-three countries received less than US$1 per person in DRR over the decade

DRR IN CONTEXT

Fourteen countries ranked as mortality risk medium -high to severe received only US$351.1 million of DRR combined

Fourteen countries collected less than US$100 per person in government revenues in 2010; only two of these received more than US$50 million in DRR over the decade



Note: All figures are for 2000–2009 except where indicated.

TOP HUMANITARIAN RECIPIENTS: AID AND DISASTER

The top recipients of humanitarian aid are particularly relevant when it comes to examining risk reduction financing. Firstly, these countries account for the vast bulk of humanitarian expenditure each and every year; it is to them that nine out of every ten humanitarian dollars go annually, and therefore they account for the continually upward pressure on humanitarian financing. Secondly, these are precisely the countries that are susceptible to the risk of natural hazards becoming natural disasters, and where those natural disasters have particularly significant impacts. This suggests that these are the places where the bulk of risk reduction funding should be spent.

HUMANITARIAN EXPENDITURE IS CONCENTRATED

By 2009 the top 40 recipients accounted for 92% of all humanitarian funding, with a similar figure reported in each of the previous six years. In the earlier years of the decade humanitarian aid was much less concentrated, with the top 40 recipients accounting for 74% in 2000. The top five recipient countries account for a particularly remarkable proportion of humanitarian financing, peaking at nearly 50% in 2003 and 2004. In the past five years this proportion has remained relatively stable at around 40%.

AID PROFILES OF TOP HUMANITARIAN RECIPIENTS DIFFER CONSIDERABLY

The major recipient countries of humanitarian assistance are in many ways very different. Some cover millions of square miles in area and have large populations, such as Pakistan and Indonesia. Others are relatively small and landlocked, such as Chad, Burundi and Serbia. Some of the countries have suffered from major single disasters that that have killed tens of thousands of people in a matter of moments, such as Haiti, Pakistan and Iran. Others have suffered long-developing droughts that rarely make the headlines but affect millions of people year on year. Some countries are major commodity producers and have significant government revenues as a result – Angola, Iraq and Algeria are examples – while others are amongst the smallest economies in the world and have the least available government revenues.

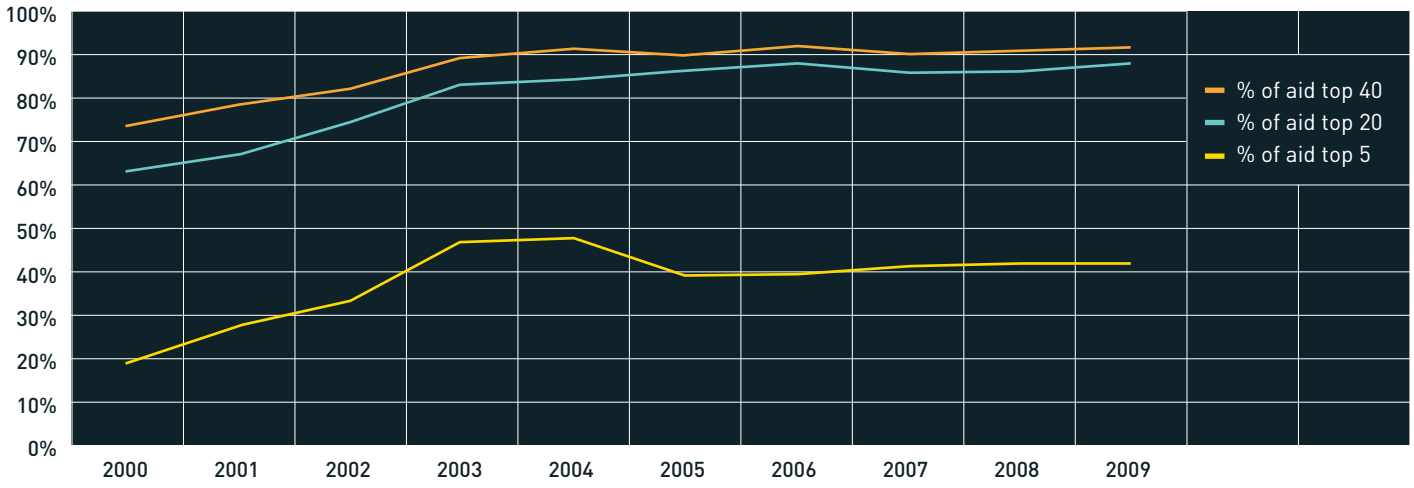
One feature that almost all the countries share, beyond considerable humanitarian financing, is conflict. Only 6 of the 40 top recipients have not suffered at least one year of conflict during the decade: Democratic People's Republic of Korea (DPRK), Jordan, Mozambique, Tanzania, Zambia and Zimbabwe.

SAME AID, DIFFERENT COUNTRIES

India and Mozambique have received US$17.8 billion and US$16.1 billion of aid respectively over the decade, of which US$628 million and US$534 million has been humanitarian financing. These two countries are good examples of how aid flows can be very similar in countries that are contextually very different.

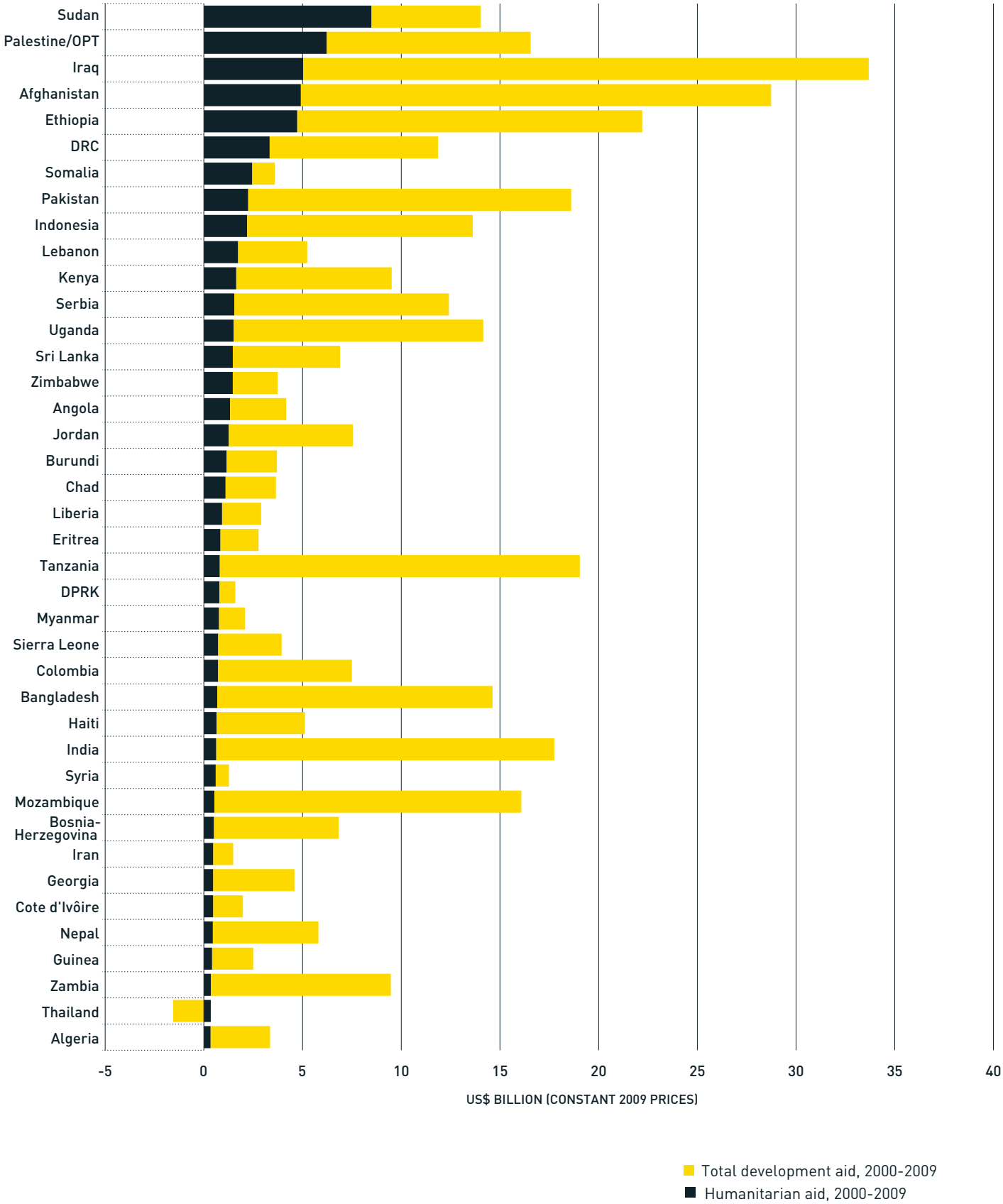
India has the tenth largest economy in the world, with a gross domestic product (GDP) in 2011 of US$1.84 trillion, and a population of more than 1.2 billion. Mozambique is ranked 122nd in terms of GDP with a 2011 figure of US$12.1 billion. It has a population of 23 million. India's economy is 150 times bigger than Mozambique's, with a population only 51 times bigger.[1] Per person, residents of Mozambique received US$781 in ODA over the decade. Indian residents received only US$16, the lowest of all top humanitarian recipients.

FIGURE 1: CONCENTRATION OF HUMANITARIAN AID IN THE TOP 40 RECIPIENTS



Source: Development Initiatives based on OECD DAC and FTS

FIGURE 2: AID TO TOP HUMANITARIAN RECIPIENTS, RANKED BY VOLUME OF AID THAT IS HUMANITARIAN[2]



Source: Development Initiatives based on OECD DAC

Some countries – Sudan, Palestine/OPT, Democratic Republic of Congo (DRC), Somalia, Iraq, Ethiopia – have been major recipients of humanitarian assistance for the whole of the decade. Three have become major recipients since 2005: Pakistan, Lebanon and Chad. Others have received smaller but regular amounts of assistance on a near-yearly basis, such as Uganda, Zimbabwe, Burundi and Jordan.

The relationship between humanitarian aid and overall development aid is not necessarily the same for all the top humanitarian recipients. Some countries have received a much higher proportion of overall aid as humanitarian assistance. For example, humanitarian assistance to Sudan, Somalia and Palestine/OPT makes up a particularly significant proportion of all aid (61%, 68% and 38% respectively), reflecting the seeming intractability of the crises in each of these countries and the challenges of fostering development.

Meanwhile, some major humanitarian recipients have received far less aid in the form of humanitarian assistance than for development. This is partly a factor of timing. Countries such as Serbia, Angola and Mozambique were in conflict at the beginning of the decade but the need for humanitarian expenditure has diminished in favour of development aid, with priority being given to supporting reconstruction. Other countries are a particular focus for donors: for example, both Ethiopia and Pakistan border areas of conflict and are of strategic interest. Iraq and Afghanistan stand out; in both cases, conflict with US-led coalitions was followed by massive donor nation involvement in reconstruction and state-building.

In terms of official development assistance (ODA) volumes, the reconstruction of Iraq and Afghanistan has resulted in these countries coming first and second over the decade. The US$33.7 billion and US$28.7 billion that they have received, respectively, accounts for 9.3% of all aid expenditure over the period, equating to just under one in every ten dollars spent. Ethiopia was fourth with US$22.2 billion and Pakistan was sixth with US$18.6 billion. India, Palestine/OPT and Mozambique also make it into the top ten over the decade. Some of the top recipients of humanitarian assistance have received very little development aid at all. The DPRK and Myanmar are examples, largely for reasons to do with the challenges of delivering development aid in these countries.

There is actually significant overlap in the top 20 countries of the two aid categories, with 15 of the top recipients of humanitarian assistance also in the top 20 for ODA. Yet this is not the case for the next 20 highest recipients of ODA; major humanitarian recipients account for only five of these. Over the decade, the top 40 humanitarian recipients accounted for US$363 billion of all ODA, 30% of the total of US$1,229 billion for all countries. They, in effect, received nine out of every ten humanitarian dollars, but only three out of every ten ODA dollars.

This balance of humanitarian and development funding is important. Risk reduction is recognised as a long-term national investment that needs to be mainstreamed through a country's ministries and activities. Humanitarian funding, with its relatively short-term planning and engagement, is considered unsuitable for supporting these activities, though it should be noted that examples of this happening are not uncommon. Data on the split of DRR financing between humanitarian and development funding is made problematic by reporting issues. However, perhaps worryingly, for 2009, the year for which we have the most robust data, 68% of all DRR funding to the top humanitarian recipients came from humanitarian financing, not development. Given the pressure on humanitarian financing to 'respond' to more and larger crises, the question must be asked whether this is sustainable, notwithstanding the structural issues within humanitarian aid.

TABLE 1: TOP 40 RECIPIENTS OF ODA, 2000-2009

	ODA (US$ bn)
Iraq	33.7
Afghanistan	28.7
Vietnam	23.6
Ethiopia	22.2
Tanzania	19.0
Pakistan	18.6
China	17.8
India	17.8
Palestine/OPT	16.6
Mozambique	16.1
Bangladesh	14.6
Uganda	14.2
Sudan	14.0
Indonesia	13.6
Serbia	12.4
DRC	11.9
Ghana	11.5
Egypt	11.4
Kenya	9.5
Zambia	9.5
Morocco	8.8
South Africa	8.4
Bolivia	8.0
Nicaragua	8.0
Senegal	7.9
Burkina Faso	7.8
Mali	7.6
Jordan	7.5
Colombia	7.5
Nigeria	7.3
Sri Lanka	6.9
Bosnia-Herzegovina	6.8
Madagascar	6.6
Malawi	6.6
Cambodia	6.4
Turkey	6.3
Rwanda	6.2
Philippines	6.0
Nepal	5.8
Honduras	5.8

Note: Figures in constant 2009 prices. Highlighted countries are also amongst the top 40 humanitarian recipients. Source: Development Initiatives based on OECD DAC

MAJOR HUMANITARIAN RECIPIENT COUNTRIES ARE DISPROPORTIONATELY AFFECTED BY DISASTER

Major recipients of humanitarian assistance have accounted for substantial numbers of disasters, with many people affected and killed and substantial economic damage sustained. This is unsurprising since this impact is in many cases precisely why they needed the assistance.

What is clear, however, is that the impact of disasters is significantly higher in such countries when compared with other disaster-affected nations. Over the decade 2000–2009 the top 40 humanitarian recipients accounted for 1,286 disasters, 32.1% of the total. The proportion of people affected was significantly higher than this, at 52.5%, and the proportion of people killed over the ten years was 78.7%. Essentially, although major humanitarian recipient countries suffer three in every ten disasters, they account for five out of every ten people affected and seven out of every ten people killed.

There is no discernible trend for disasters within humanitarian recipient countries except that in general they follow the trend for all affected nations, with a rise in figures from 1997 to 2000. Peak years in terms of numbers of disasters in 2000, 2002 and 2005 were similarly high for humanitarian recipients. The year on year figures, however, reveal even more clearly how natural disasters in crisis-affected countries can have a particularly damaging impact.

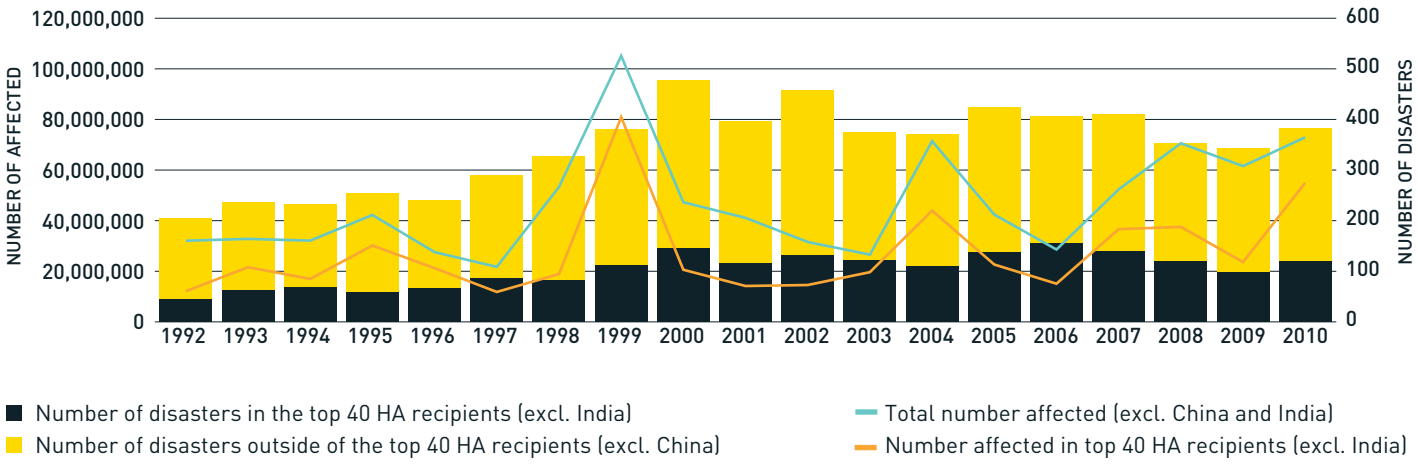
TABLE 2: DISASTER IMPACT ON THE TOP 40 HUMANITARIAN RECIPIENTS AGAINST TOTAL DISASTER FIGURES, 2000-2009

	TOP 40 HUMANITARIAN RECIPIENTS	ALL COUNTRIES	% TOP 40 RECIPIENTS
Total affected	248,506,824	473,460,284	52.5%
Total mortality	536,321	681,313	78.7%
Total number of disasters	1,286	4,012	32.1%
Total estimated damages	US$50 billion	US$682 billion	7.3%

Note: These figures exclude India inside the top humanitarian recipients and China in 'all countries'.
Source: EMDAT CRED

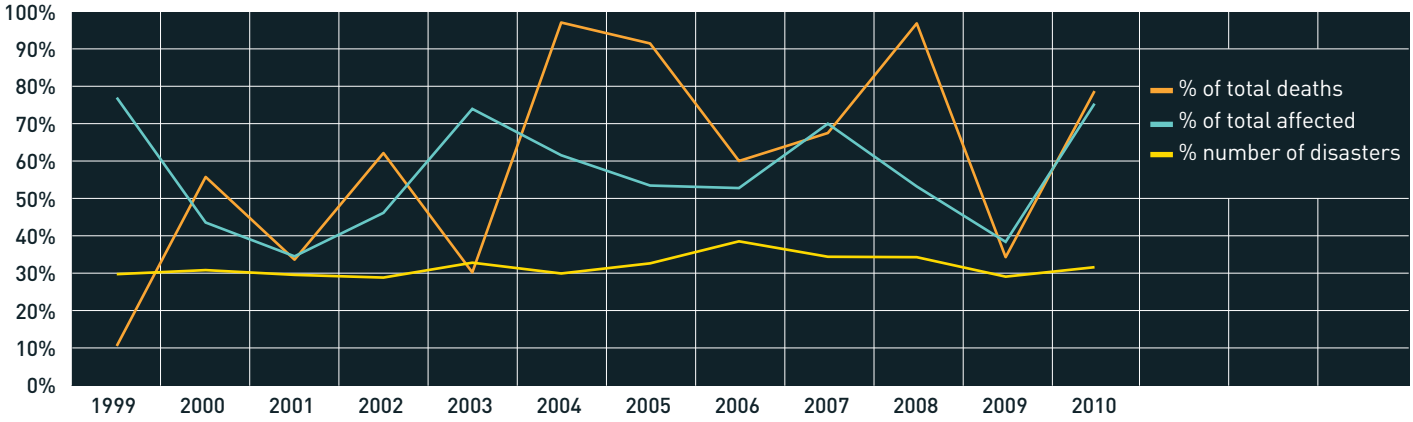
The pattern of disaster numbers is remarkably stable, with between 29% and 38% of all disasters occurring in major humanitarian recipients over the period examined. The proportion of people affected is startlingly different, however, and much more erratic (this depends in part on the nature of different kinds of disaster and their impact. See box at base of page 7 on Haiti, "Disasters and their varying impacts"). 2001 was the year with the lowest figure, with fewer than 35% of people affected living in the top 40 humanitarian recipient countries. In four years, however – 1999, 2003, 2007 and 2010 – the proportion was

FIGURE 3: TOTAL NUMBER OF DISASTERS AND AFFECTED NUMBERS FOR THE TOP 40 HUMANITARIAN RECIPIENTS OVER TIME IN COMPARISON WITH TOTAL FIGURES



Source: EMDAT CRED

FIGURE 4: PROPORTIONS OF DISASTERS, PEOPLE AFFECTED AND PEOPLE KILLED, LIVING IN TOP HUMANITARIAN RECIPIENT COUNTRIES, EXCLUDING INDIA AND CHINA



Source: Development Initiatives based on EMDAT CRED

close to 80%. There is no easily identifiable reason for the peaks in 2003 and 2007. In 1999 a drought in Iran affected 37 million people, 31% of all those affected in that year (excluding India and China). 2010 was remarkable for two mega-disasters of very different kinds, the Pakistan floods and the Haiti earthquake, but it was Pakistan's flood victims (20 million affected) who accounted for 20% of all people affected, while Haiti's 3.5 million were only 3.5% of the total for that year.

The proportion of people killed is also startlingly high for humanitarian recipients. In three years – 2004, 2005 and 2008 – the proportion of people killed living in these countries was more than 90% of the total. In these years, although accounting for just three in every ten disasters, major humanitarian recipients accounted for nine out of every ten deaths, with the 2004 Boxing Day tsumani, the Kashmir earthquake in 2005, and Cyclone Nagris in Myanmar in 2008 partly responsible.

Undoubtedly this severity of impact is due to these countries' relatively poor infrastructure, weaker government capacity for planning and response and their often large populations living on the fringes of habitable space, frequently on the edges of urban areas. These populations often lack basic facilities such as adequate housing, clean water and sanitation, roads and electricity. This, combined with their relatively limited means of coping with sudden crises, and compounded by weak infrastructure and government capacity, can easily turn a natural event into a disaster.

TABLE 3: HAITI DISASTER IMPACT, 2010

DISASTER TYPE	OCCURRENCE	TOTAL DEATHS	% OF DEATHS	TOTAL AFFECTED	% OF AFFECTED	TOTAL DAMAGE (US$bn)	NUMBER AFFECTED FOR EACH DEATH
Earthquake	1	222,570	98.3%	3,500,000	92.5%	8	15.7
Epidemic	1	3,790	1.7%	185,012	4.9%	n/a	48.8
Flood	3	44	0.0%	22,087	0.6%	n/a	502.0
Storm	2	27	0.0%	78,142	2.1%	n/a	2,894.1
Total	7	226,431		3,785,241			

Source: Development Initiatives based on EMDAT CRED

DISASTERS AND THEIR VARYING IMPACTS

Not all disasters have the same impact. In some cases a single disaster can have the same effects as many others. Haiti is a good example. In 2010 seven natural disasters were reported in the country. One of these, the January earthquake, accounted for 98.3% of all deaths and 92.5% of all people affected. (In contrast, the far larger earthquake that hit Chile in 2010, causing US$30 billion in damages, had a much lower death toll of 562 people.)

COUNTRY FOCUS: INDIA AND CHINA – EIGHT OUT OF EVERY TEN AFFECTED

India and China are such large countries with huge populations that inclusion within the data on numbers of disasters and in particular numbers of people affected can tend to mask key data and trends within other countries affected by disaster. We have therefore removed both countries from the overall analysis (India from the top 40 humanitarian recipients and China from all other countries). However, the very fact that so many millions of people each and every year are affected in these countries demands attention.

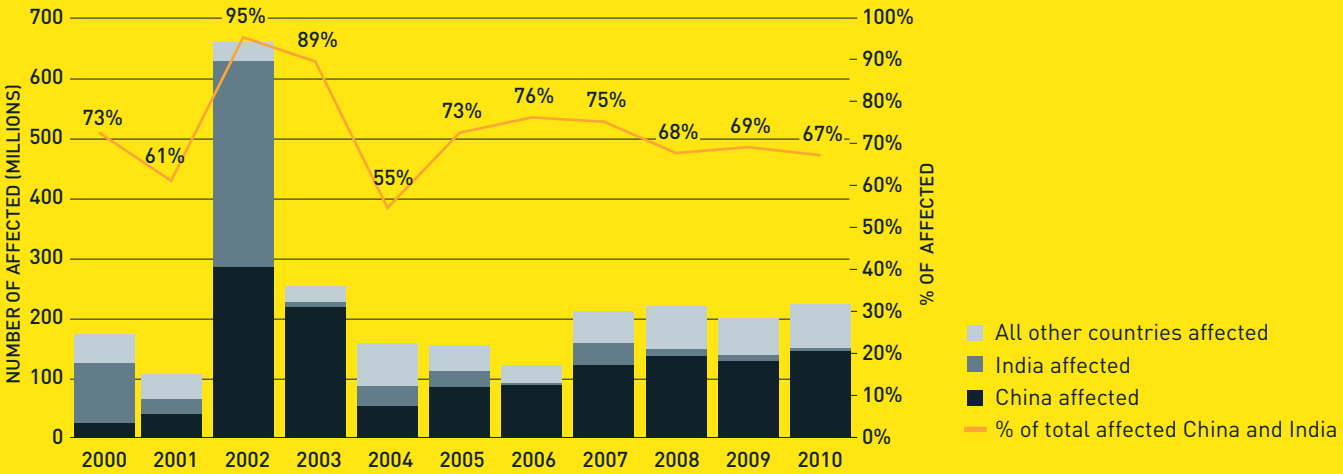
Over the 11-year period from 2000 to 2010, nearly eight out of every ten people affected by a natural disaster have been either Indian or Chinese.

2002 was remarkable, with more than 627 million people affected being either Chinese or Indian – 95% of the total in that single year. China suffered a wave of droughts, floods and storms, which affected more than 285 million people. In India one single disaster, a drought, affected 300 million people, 42% of the total that year worldwide. This drought, which occurred after one of the shortest monsoon seasons on record, affected ten states and 56% of the entire country. Agricultural GDP shrank by 3.1% and overall GDP by 1% as a result.[3]

Perhaps unsurprisingly, the size of both these countries means that when disasters occur they can affect much higher numbers of people than elsewhere. Taking 2002 as an example once more, the total number of disasters in China and India was 47 out of a total of 458, equivalent to just over 10%. So while the two countries accounted for more than nine out of every ten people affected in that year, it was with less than one out of every ten disasters. Over the decade the proportion of disasters occurring in India and China has been stable at between 8% and 13% each year – an average of 10% of all disasters over the ten years. This compares with the fact that 78% of all people affected over the decade were Chinese or Indian.

The disaster profiles of both countries are in some ways similar, with drought and floods being particularly damaging. Through the decade China has experienced repeated and severe natural disasters, including significant earthquakes and storms. In each of the last four years more than 120 million people in China have been affected by natural disaster, a period in which an average of only 15.7 million Indians were affected.

FIGURE 5: POPULATIONS AFFECTED BY NATURAL DISASTER: INDIA, CHINA AND THE REST OF THE WORLD



Source: Development Initiatives based on EMDAT CRED

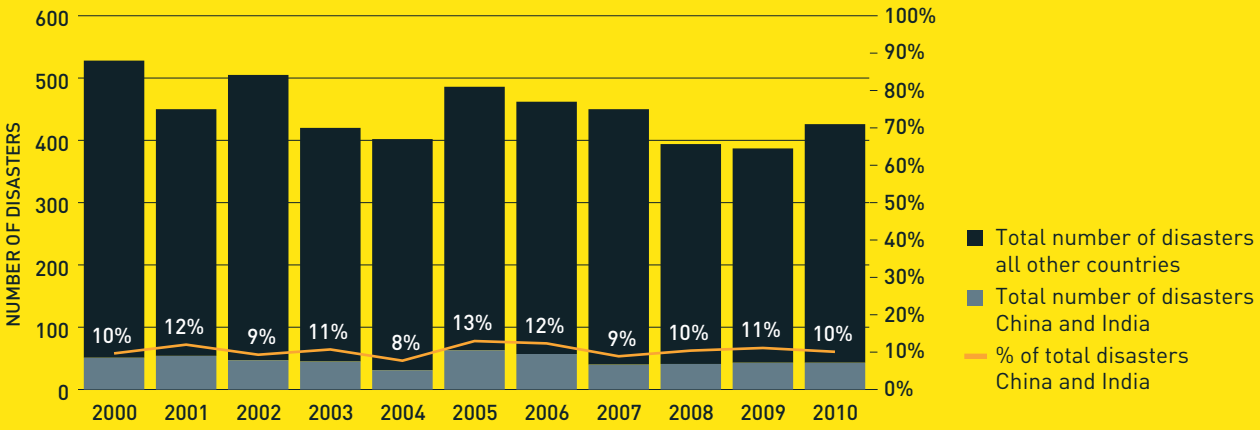
TABLE 4: DISASTER PROFILE OF CHINA AND INDIA

	CHINA 2000-2010			INDIA 2000-2010		
	AFFECTED	MORTALITY	NUMBER	AFFECTED	MORTALITY	NUMBER
Drought	241,524,000	134	16	350,000,000	20	3
Earthquake (seismic activity)	52,807,377	90,924	51	5,012,599	37,705	4
Epidemic	6,829	423	5	225,412	1,528	24
Extreme temperature	77,000,000	191	5	-	5,276	18
Flood	665,832,382	7,692	104	242,173,116	14,399	106
Mass movement	2,157,600	3,144	36	12,000	572	13
Storm	282,039,647	3,319	91	5,475,905	1,273	36
Wildfire	0	22	2	–	–	–
Total	**1,321,367,835**	**105,849**	**311**	**602,899,032**	**60,773**	**204**

Source: EMDAT CRED

Context is key, however, both to how countries cope with natural hazards and their impact and to the place of international aid, as we discuss later in this report. Perhaps China is more able to cope with natural disasters than India. Despite similarities in population (China's is the largest in the world and India's the second) and in size of the country (third and seventh largest respectively), China is an upper middle-income nation while India is ranked in the lower category of lower middle-income countries. The poverty figures are particularly revealing. According to the Multidimensional Poverty Index (MPI), the countries are ranked first and second in terms of total numbers of people considered to be poor. However, India has more than 600 million poor people, four times the number of China.[4]

FIGURE 6: NUMBER OF DISASTERS IN INDIA, CHINA AND THE REST OF THE WORLD AND PROPORTION OF AFFECTED POPULATION



Source: Development Initiatives based on EMDAT CRED

FINANCING FOR DISASTER RISK REDUCTION

DRR IS A FRACTION OF AID

At first glance, trends in the financing of DRR to these key countries seem positive. Since 2000, DRR investments to the value of US$3.7 billion have been made from all aid to the top recipients of humanitarian assistance. Funding grew from US$121 million in 2000 to a peak of US$809 million in 2007, before falling back to US$338 million in 2009. Yet at the same time this is a very small percentage of overall development aid spent in these same countries. Only in two years, 2006 and 2007, has DRR expenditure ever reached above 2% of ODA, and over the entire decade it was only 1%. Essentially less than one dollar for every 100 has been spent on reducing disaster risk. Given that the economic damages for top humanitarian recipients have been estimated as at least US$74 billion, this figure of US$3.7 billion seems insubstantial.

There is further concern, looking beyond overall annual volumes of DRR financing, as those volumes hide not just variability but also very high concentrations of investments in just a few contexts. The aid trends over the decade do not show a sudden increase in expenditures from 2005 through to 2007, such as may be influenced by the lessons learned after the Indian Ocean tsunami of 2004. There is no sudden general increase in the amount of funding going to countries in need. Rather, the increases are much more about single large projects that dominate overall spending.

In 2005, 63% of all DRR funding to top humanitarian recipients was for just two projects: US$116 million (32%) for a single World Bank reconstruction programme in Pakistan that focused on seismic-resistant house construction and a US$110 million (31%) project, also by the World Bank as part of its Gujarat recovery programme, that focused on "sustainable disaster management capacity". In 2006, 71% (US$539 million) of all DRR funding for the top 40 humanitarian recipients was made up of two World Bank projects for Pakistan, one that linked DRR to reconstruction and another that mainstreamed DRR across multi-sectoral activities. In the following year, a single contribution from Japan of US$244 million to Indonesia to support its disaster management policy implementation accounted for 30% of funding to the top humanitarian recipients. The drops in funding for 2008 and 2009 are therefore much less about changes in donor priorities and more about the lack of single large projects for single recipient countries in those years.

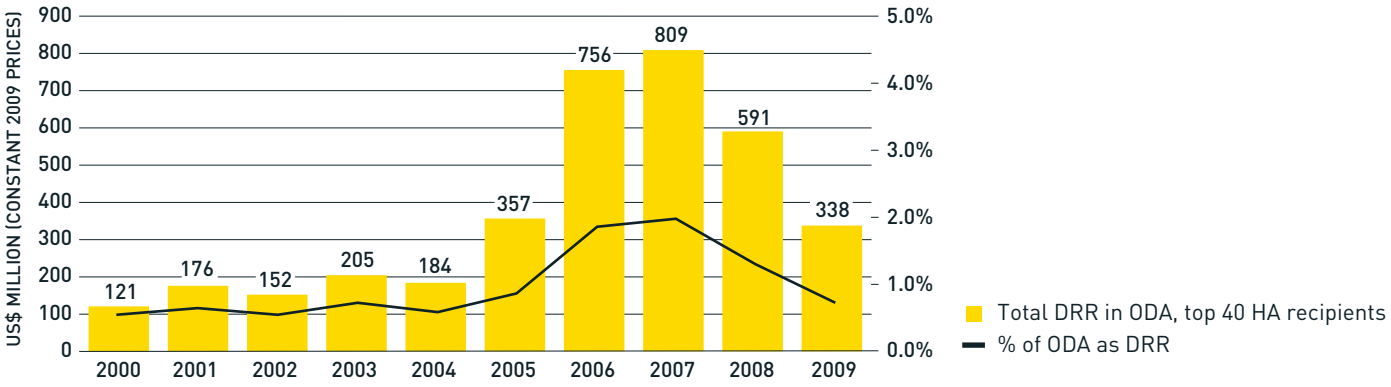
THE SEMANTICS OF DRR, PREPAREDNESS AND THE DATA CONNECTIONS

The semantics of DRR are somewhat intimidating, with complex interconnected terms made more complicated by the loose use of those terms. This confusion is also reflected in the data available.

The use of "DRR" in this report is taken from UN International Strategy for Disaster Reduction (UNISDR) terminology: "systematic efforts to analyse and manage the causal factors of disasters". As there is no DRR code within the Organisation for Economic Co-operation and Development (OECD)'s Development Assistance Committee (DAC) database, a forensic method has been used to pull out investments made in reducing risk. This research has been particularly generous since many projects may actually include DRR as an element, perhaps as something cutting across other sectors; we have, without further information, added the entirety of this to our data. See methodology section for details.

For the purposes of this report we have used preparedness to mean "disaster preparedness and prevention" (DPP), a humanitarian code that contains mostly activities designed as preparedness to respond to disasters.

FIGURE 7: DISASTER RISK REDUCTION EXPENDITURE IN TOP HUMANITARIAN RECIPIENTS



Source: Development Initaitives based on OECD DAC

A further complication, however, is that the available data does not show us the duration of projects. This is particularly significant in the case of longer-term loans and grants, such as those made by the World Bank, where a single project appearing in the available data as a DRR investment in a single year is actually a multi-year project. With this detailed information at hand (and it is not currently available in an easy-to-use form), we could expect a much smoother transition of DRR from 2006 through to 2009.

Through the decade, the number of countries actually funded for DRR has grown. In 2000 there were 13 countries; this grew to 39 countries by 2009, with Iran the only top humanitarian recipient not to receive DRR financing in that year. There was a considerable jump from 18 to 28 countries from 2003 to 2004, and levels continued to rise for much of the rest of the decade. There is evidence to suggest that this sudden increase was less to do with changing donor priorities, however, and more to do with the introduction of the "disaster preparedness and prevention" code as part of humanitarian reporting within the OECD DAC database.

TABLE 5: NUMBER OF TOP HUMANITARIAN RECIPIENTS RECEIVING DRR FINANCING

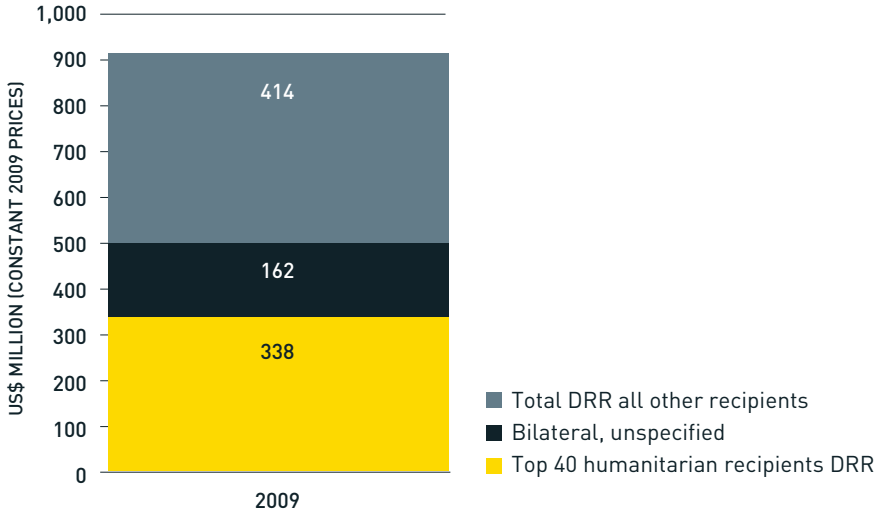
	NUMBER OF TOP RECIPIENTS RECEIVING DRR
2000	13
2001	16
2002	15
2003	18
2004	28
2005	31
2006	31
2007	29
2008	37
2009	39

Source: Development Initiatives based on OECD DAC

TOP HUMANITARIAN RECIPIENTS RECEIVE LESS THAN OTHER COUNTRIES

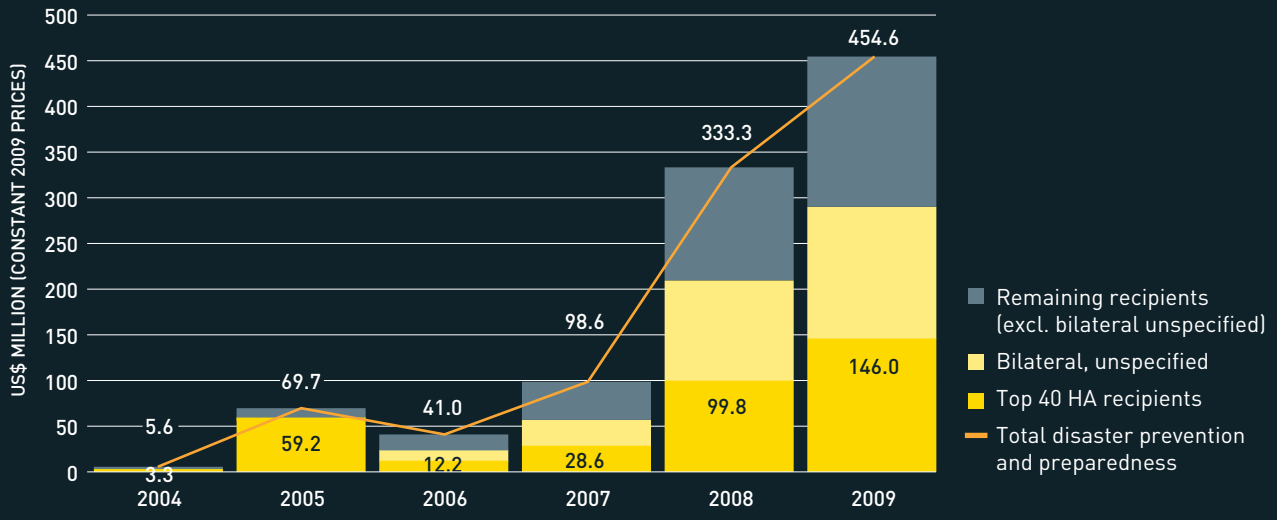
In 2009, the year in which we have investigated DRR expenditures for all countries, we find that the major humanitarian recipients combined received less funding than other aid recipients, this despite the fact that they suffer particularly from natural disasters. In 2009, 37% (US$338 million) of DRR went to the top 40 recipients of humanitarian assistance, with US$414 million going to the remaining countries. Notable recipients outside of the top 40 were Vietnam (US$50 million), the Philippines (US$50 million) and China (US$36 million).

FIGURE 8: BREAKDOWN OF DRR RECIPIENTS



Source: Development Initiatives based on OECD DAC

FIGURE 9: TOTAL VOLUMES OF DISASTER PREVENTION AND PREPAREDNESS



Source: OECD DAC

MINIMAL INVESTMENTS IN DISASTER PREPAREDNESS AND PREVENTION

We would imagine that even though top humanitarian recipients do not receive a huge proportion of their overall aid as DRR, they would at least receive a significant proportion of their humanitarian assistance as disaster prevention and preparedness, especially since there are specific reporting lines for donors to report their prioritisation for activities before a crisis strikes.

Over the six years for which data is available, there is considerable growth from a very low figure of US$4.4 million to all countries in 2004 (a figure we consider to be largely driven by the fact that the reporting was new). In 2009 preparedness and prevention expenditures to all recipients rose to their highest ever figure of US$454.6 million. Of this, US$146 million was clearly given to the top 40 humanitarian recipients (see box on "Bilateral unspecified", page 13).

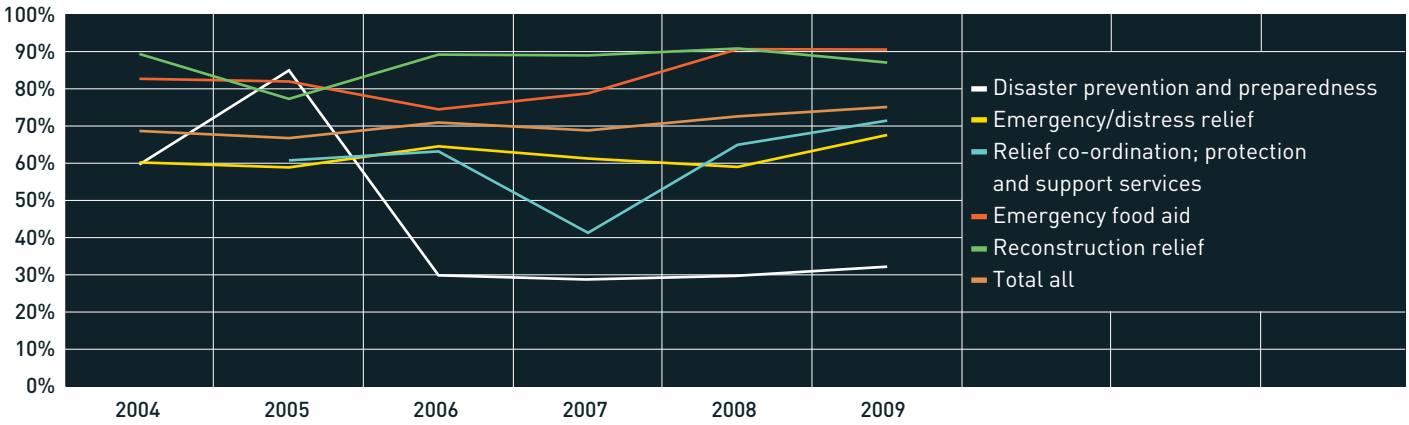
However, these sums are almost completely insignificant when compared with overall humanitarian financing in the same period to the top 40 humanitarian recipients.

TABLE 6: TOP 40 RECIPIENTS' PREPAREDNESS/PREVENTION EXPENDITURE, 2005-2009

YEAR	DISASTER PREVENTION AND PREPAREDNESS	ALL OTHER BILATERAL HA TO THE TOP 40 RECIPIENTS	TOTAL BILATERAL HA TO THE TOP 40 HA RECIPIENTS	% HA AS DISASTER PREVENTION AND PREPAREDNESS
2004	3.3	4,501.2	4,504.5	0.1%
2005	59.2	7,057.9	7,117.1	0.8%
2006	12.2	6,365.3	6,377.6	0.2%
2007	28.6	5,734.4	5,763.0	0.5%
2008	99.8	7,796.7	7,896.5	1.3%
2009	146.3	7,939.9	8,086.2	1.8%
Total	349.4	39,395.4	39,744.9	0.9%

Note: Figures expressed in US$ million, constant 2009 prices. Source: OECD DAC

FIGURE 10: PROPORTION OF BILATERAL HUMANITARIAN SECTOR FUNDING TO TOP 40 HUMANITARIAN RECIPIENTS



Source: OECD DAC

The 2009 figure of US$146.3 million for disaster prevention and preparedness is dwarfed by the US$8.1 billion of overall humanitarian expenditure allocated to the top 40 recipients of humanitarian aid, and is equivalent to just 1.8% of the total. Of the total US$39.7 billion of humanitarian aid spent specifically in these same countries over these five years, only US$349 million was on disaster prevention and preparedness, or 0.9%. For every US$100 spent on response to humanitarian need, therefore, less than 90 cents was spent on preparing for or preventing that need.

One would imagine that, despite the poor overall volumes dedicated to disaster prevention and preparedness, the major humanitarian recipients should make up the major proportion of these investments before a crisis occurs. However, this is not the case.

By 2009 humanitarian funding going straight to recipient countries (bilateral funding) reached US$10.7 billion. Of this funding, the top 40 countries made up a very stable percentage of close to 70% each year. For some of the specific humanitarian reporting lines they received a particularly large proportion; for example, in 2009, 91% (US$2.9 billion) of total food aid of US$3.2 billion went to the top 40. A similarly large proportion of the other line that received considerable volumes of funding, emergency distress/relief, also went to top humanitarian recipients – in 2009, US$3.6 billion of the total US$5.4 billion, equating to 68%. However, while the top 40 made up the largest proportion in four of the five codes, the share of DPP was remarkably low, hovering at only about 30% in each of the last four years. Essentially, more funding for disaster preparedness and prevention is going to countries that are not major humanitarian recipients than to those that are.

WHAT IS BILATERAL UNSPECIFIED?

A number of members of the OECD DAC report portions of their bilateral ODA as "bilateral, unspecified". As a result, much of their aid is not allocated geographically by recipient or region. Bilateral unspecified allocations are made for expenditures on administrative costs, global programmes and unearmarked contributions to implementing partners that cannot be allocated by recipient country.

For practical purposes in this report, the bilateral unspecified DRR expenditure indicated in Figure 9 includes, for example, contributions to the UNDP Bureau of Crisis, Prevention and Recovery (BCPR) and the World Bank Global Fund for Disaster Risk Reduction (GFDRR). These organisations then disburse funds to recipient countries, some of which are also top humanitarian recipients.

POOLED FUNDS FOR PREPAREDNESS AND DRR

Funding mechanisms do exist that finance DRR and preparedness activities, although to significantly varying levels. Humanitarian funds focus more on preparedness. There are three main types of pooled humanitarian fund that finance preparedness: the Central Emergency Response Fund (CERF), common humanitarian funds (CHFs) and emergency response funds (ERFs).[5]

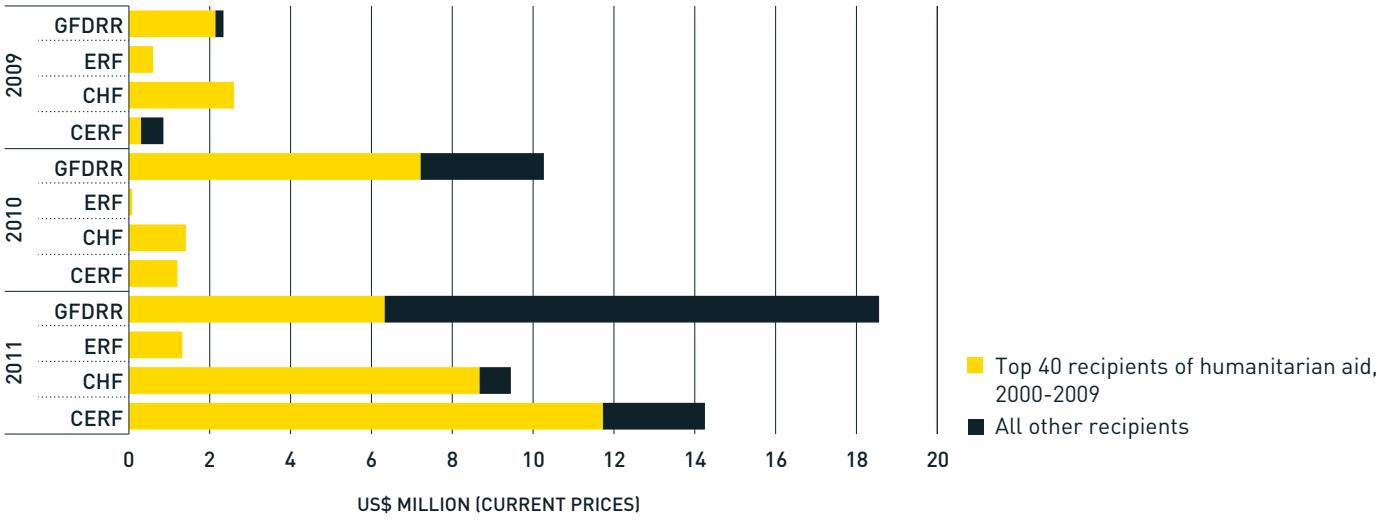
Despite the global CERF being limited by its emergency response mandate, it has funded some preparedness activities, but only in the last year of operation. In the second half of 2011 it channelled almost US$12 million to preparedness in three of the top 40 recipient countries – Ethiopia, Kenya and Sudan – but this was still a small fraction of the total US$426.2 million spent that year.

The four country-level CHFs in operation continue to attract considerable donor support – US$354 million in 2011. Nevertheless, only 3% of the total channelled by the funds was spent on preparedness. Three of the funds operate in countries that are among the top 40 humanitarian recipients – DRC, Sudan and Somalia. In total these funds disbursed US$8.7 million to preparedness activities in 2011, an increase on 2010 and 2009 figures but still a very modest proportion, accounting for 3.9% of total CHF funding.

Despite the emergency response mandate of the ERFs, several have disbursed funds to preparedness projects. In 2011 Haiti's ERF spent 11.8% (US$0.8 million) on disaster and cholera preparedness. In 2010 the fund in Kenya spent 20% of its budget on flood preparedness, one of only four projects funded that year. In 2009 the ERFs in Somalia and Zimbabwe spent 5.9% and 2.9% respectively on preparedness out of the total money allocated in those countries. Unsurprisingly, each ERF is in a top 40 humanitarian recipient country.

The World Bank-managed Global Facility for Disaster Reduction and Recovery (GFDRR) is the only operational fund that is solely focused on DRR and carries out both global and country-level projects. Around 70% of its funding comes from humanitarian aid budgets and it has received almost US$200 million since its inception in 2006. Track II of the fund allocates money to 20 priority countries deemed to be most at risk of disasters, plus 11 countries earmarked by donors. Only 8 of these 31 countries are among the top 40 recipient countries. In 2010 the fund allocated a larger proportion to countries that were top 40 recipients, 70% or US$7.2 million. In 2011 it spent a similar amount, US$6.3 million, but this was a substantially lower proportion of overall expenditure that year, only 35% (note these figures do not include GFDRR expenditures that are allocated to more than one country or are regional). The total three-year DRR funding by country to the top humanitarian recipients that we can identify is still only small relative to overall aid flows, just US$15.6 million out of a total of US$33.4 million.

FIGURE 11: MONEY SPENT ON PREPAREDNESS AND DRR FROM FOUR DIFFERENT POOLED FUNDS



Source: Development Initiatives based on UN OCHA FTS and World Bank data

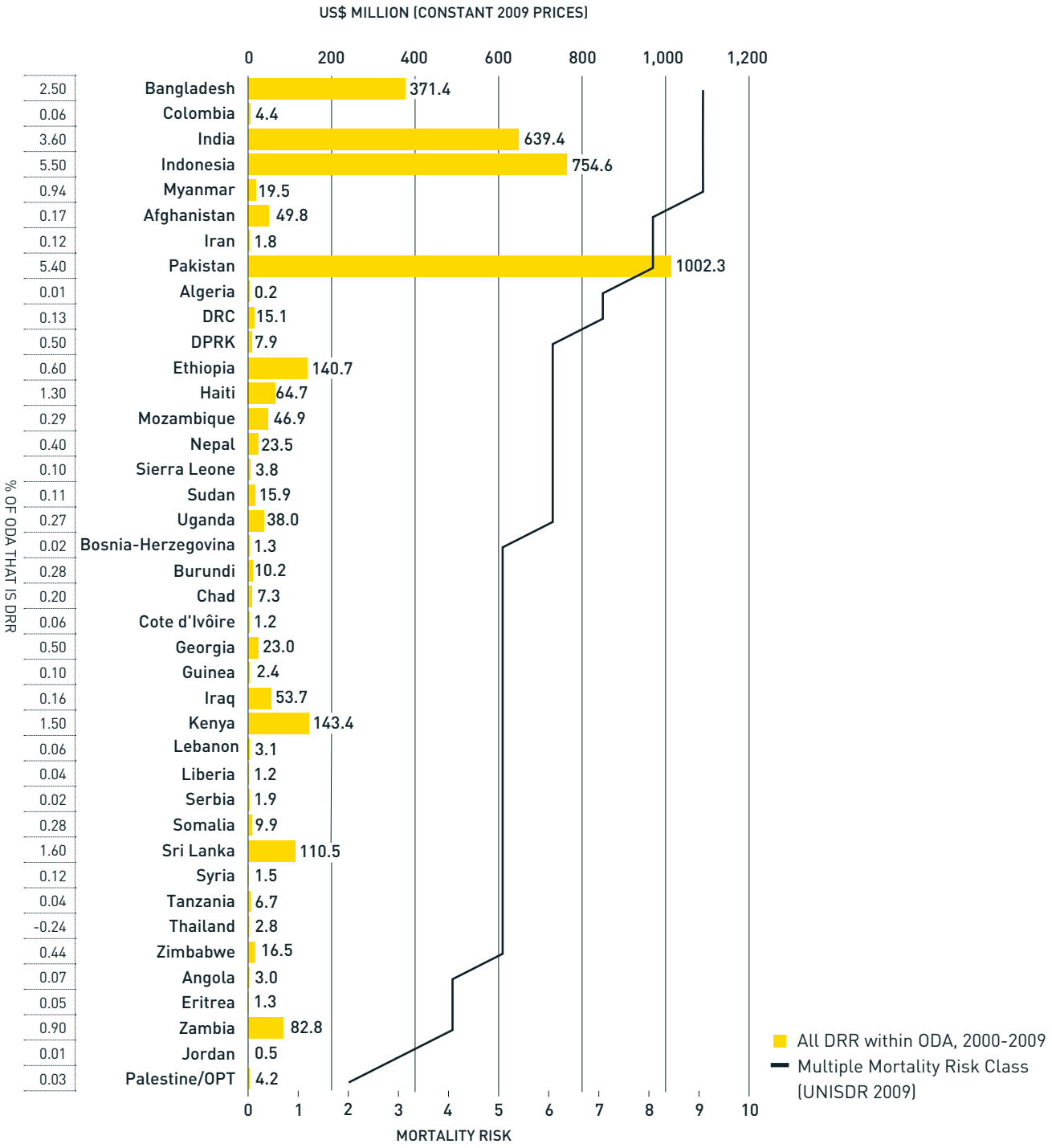
DISASTER RISK REDUCTION FINANCING IN CONTEXT

DRR IN THE CONTEXT OF RISK

It is through looking at individual countries that we can begin to understand how adequate or otherwise DRR expenditure has been over the decade, especially when we examine the context, in terms of the different risks faced from natural disaster.

The most obvious point to emerge from the data is the high level of concentration of DRR financing over the decade in just a few recipient countries. The top four recipients by volume (Pakistan, India, Indonesia and Bangladesh) received US$2.8 billion of the total US$3.7 billion received by the entire top 40 countries, or 75%. This meant that close to eight out of every ten DRR dollars going to the top humanitarian recipients went to just the top four countries. The top ten meanwhile accounted for 91.2%, leaving the other 30 to share the remaining US$325 million.

FIGURE 12: VOLUMES OF DRR OVER LAST TEN YEARS TO TOP RECIPIENTS OF HUMANITARIAN ASSISTANCE, RANKED BY MORTALITY RISK



Sources: Development Initiatives based on OECD DAC, UNISDR

Secondly, funding received varied considerably between countries that are classified as having the same mortality risk. Relatively large amounts were spent in three major risk countries, Bangladesh, India and Indonesia, but two similarly ranked countries, Colombia and Myanmar, received hardly any funding at all. Similarly low levels of funding were received by Afghanistan and Iran, both ranked very high for mortality risk. These low amounts going to high-risk countries seem even more surprising when we see how three countries much further down the rankings (Kenya and Sri Lanka ranked medium and Zambia medium-low) have received relatively high levels of funding. Zambia received US$82.8 million of DRR funding over the decade, far more than all other higher-ranked sub-Saharan countries (with the exceptions of Kenya and Ethiopia). DRC, ranked as high for mortality risk and suffering from multiple epidemics, droughts, floods and seismic activity, received only US$15.1 million over the decade.

Even the relatively large amounts going to some of those high-risk countries suddenly seem relatively insignificant when compared with overall ODA levels. The top three countries by proportion of ODA that was used for DRR over the decade (Indonesia, Pakistan and India) received only 5.5%, 5.4% and 3.6% respectively for this purpose. Only 6 of the top 40 countries received more than 1% of ODA as DRR. Sub-Saharan African countries, which are in many cases affected by a mix of droughts and floods (often compounded by conflict) and where a very large proportion of overall humanitarian spending goes each year, have received particularly low levels. The proportion over the decade for both Somalia and Uganda was 0.3%; for Sudan and DRC it was only 0.1%. There are many countries that have high levels of risk but low levels of funds for tackling risk.

DRR IN THE CONTEXT OF ECONOMY

ALL COUNTRIES CAN BE AFFECTED BY NATURAL DISASTER

Natural hazards are not confined to poorer countries or to those without systems or infrastructure and with particularly vulnerable populations. Rich and seemingly well-prepared nations can also be severely affected. The list of top ten countries by number of people affected includes five countries that are not major humanitarian recipients: China, the Philippines, Vietnam, South Africa and the United States. These top ten countries accounted for 27% of all disasters over the decade and 90% of people affected, a percentage largely made up of Indians and Chinese. The US, which ranked ninth over the period in terms of numbers affected, suffered the largest estimated economic impact, at US$353.4 billion.

WHAT ARE THE MORTALITY RANKINGS?

Mortality risk is taken from the UN Global Assessment report on DRR produced by the United Nations International Strategy for Disaster Reduction (UNISDR), with a rating of ten denoting the most at-risk countries and one the least.

Of the top 40 humanitarian recipients over the decade, five countries are classified as being at major risk (level nine), three as very high (level eight) and two as high (level seven). The risk level of medium (five) applies to the largest number (17) of the top humanitarian recipients.

TABLE 7: TOP 10 COUNTRIES AFFECTED BY NATURAL DISASTERS, 2000–2010

TOP 10 COUNTRIES AFFECTED BY DISASTERS	NUMBERS AFFECTED (MILLION PEOPLE)	NUMBER OF DISASTERS	NUMBER OF DEATHS	RATIO DISASTERS TO DEATHS	ECONOMIC COSTS (US$bn)
China	1,321.4	311	105,849	340	205,654,128
India	602.9	204	60,879	298	25,888,285
Bangladesh	73.2	90	9,696	108	5,884,000
Philippines	52.9	160	10,531	66	2,543,118
Thailand	43.6	57	9,750	171	2,433,613
Pakistan	32.8	74	79,325	1072	17,134,648
Ethiopia	29.2	48	2,926	61	9,400
Vietnam	21.8	89	3,754	42	5,759,905
United States	20.7	257	4,357	17	353,414,290
South Africa	15.3	42	708	17	866,305
% of total	**90%**	**27%**	**25%**	–	**61%**

Source: EMDAT CRED

COUNTRY FOCUS: JAPAN, A RICH NATION PRONE TO MAJOR NATURAL DISASTERS

Japan has the third largest economy in the world and in the past has spent up to 5% of its annual general budget on DRR.Yet even the richest, best-prepared nations in the world cannot completely prevent natural hazards from becoming natural disasters.

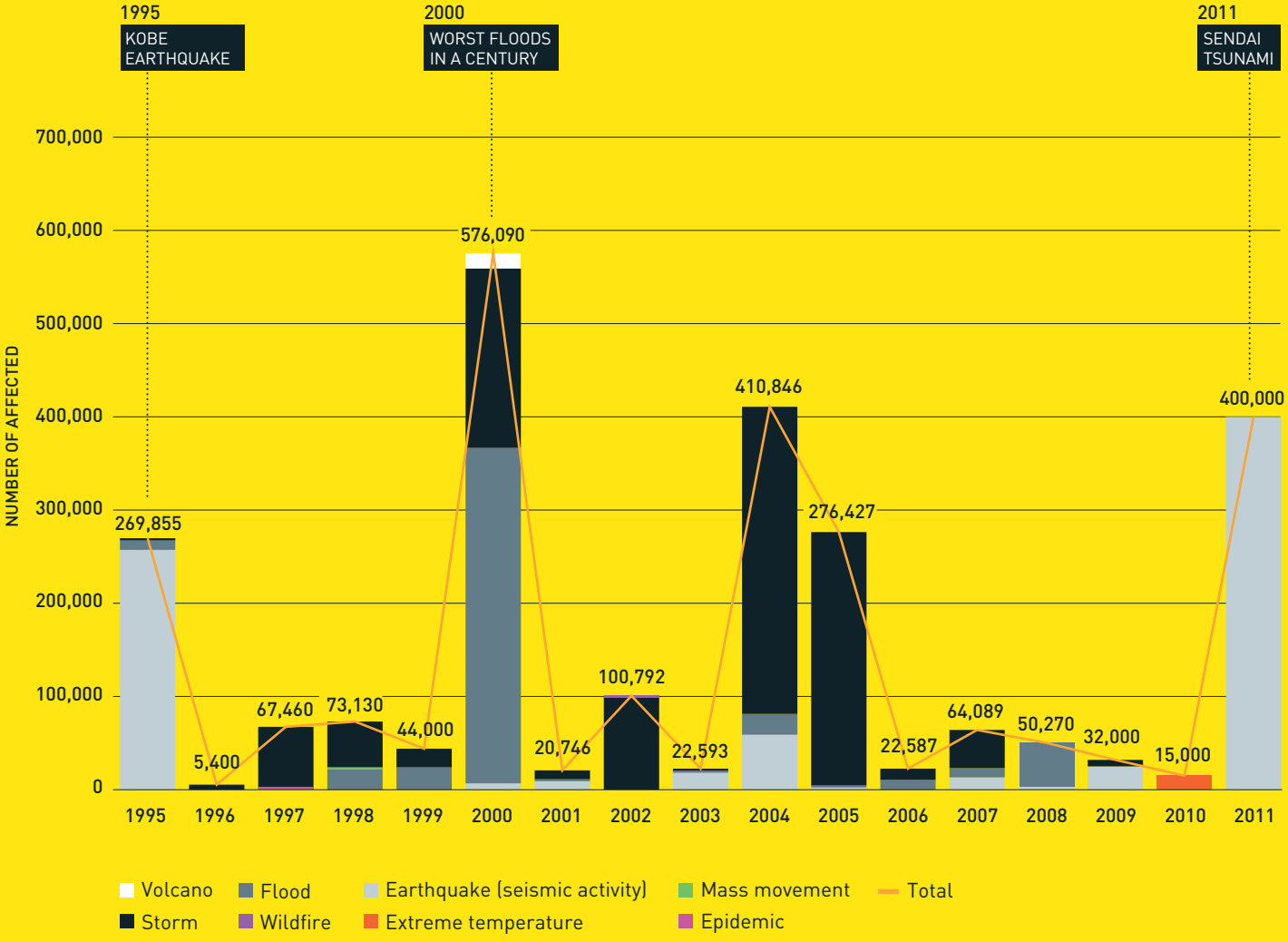
Japan has a multi-hazard profile. The country has suffered from regular seismic, flooding and storm disasters in particular, with notable events being the Kobe earthquake in 1995, the worst flooding in a century in 2000 and of course the huge tsunami in March 2011. It ranks as having the third highest number of disasters of all countries over the years 2000–2011. Its ranking for deaths due to natural disasters would have been only 49th were it not for the 2011 tsunami, which pushed it up to 10th place. The total estimated economic damages (US$288 billion) put Japan only one place behind the US; even without the massive impact of the tsunami, Japan still ranks very high, third in total estimated damages, behind the US and China.

TABLE 8: THE IMPACT OF DISASTERS IN JAPAN

JAPAN DISASTERS	TOTAL 2000-2011	RANK
Number of disasters	72	13/201
Number affected	1,991,840	46/201
Number of deaths	21,365	10/201
Economic damages	US$288 bn	2/201

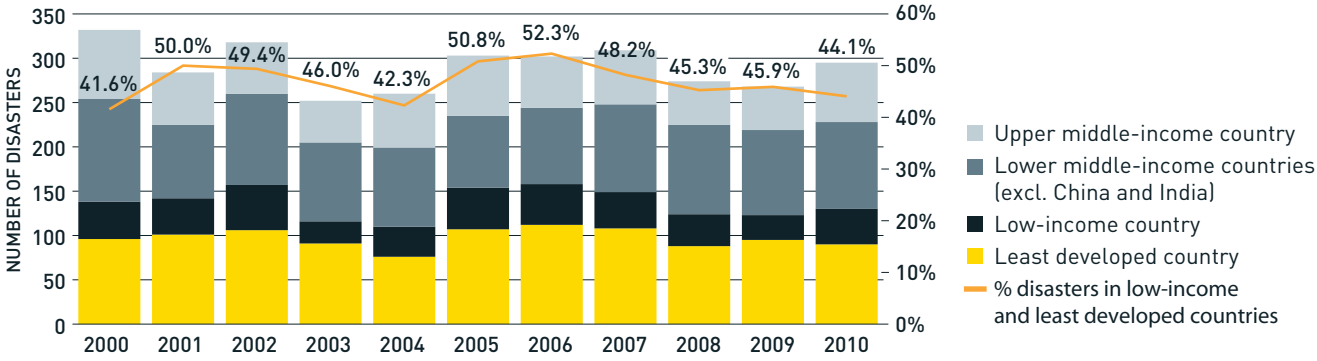
Source: EMDAT CRED

FIGURE 13: AFFECTED NUMBERS AGAINST DISASTER TYPE, JAPAN



Source: EMDAT CRED

FIGURE 14: NUMBER OF DISASTERS IN DEVELOPING COUNTRIES



Sources: EMDAT CRED and OECD (income groups are determined by the OECD for 2009 and 2010)

POOREST COUNTRIES SUFFER FROM HIGHER PROPORTIONS OF AFFECTED PEOPLE

The poorer a country is, the more significant the impact of natural disaster. Over the 11 years from 2000 to 2010, the proportion of natural disasters in developing countries occurring in those with the lowest incomes (low-income and least developed countries) has been relatively constant at 40–50%.

However, the proportion of people affected in these same two poorest country categories was higher in all but two of the 11 years. In some years, such as 2003, 2005 and 2007, the proportion of people affected was 25% higher than the proportion of disasters.

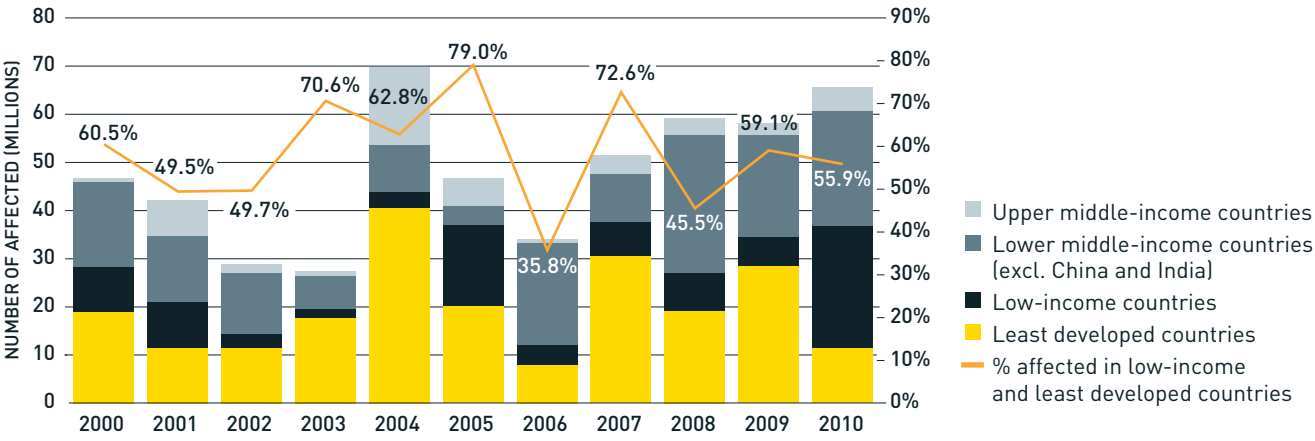
It is therefore not just major humanitarian recipients that are disproportionately affected by natural disaster, but also poor countries in general. Unsurprisingly, there is plenty of crossover between top humanitarian recipients and poorest countries. Most of the top 40 are in the poorest groups, though not all. Of the top 40 humanitarian recipients over the decade, 25 fall into the lowest two categories of income, with 20 classified as least developed and five as low-income. Thirteen are classified as lower middle-income and two are upper middle-income.

CLASSIFICATION OF COUNTRIES BY INCOME GROUP

The OECD classifies countries by income group:

- Least developed countries (LDCs) are defined by the UN based on an assessment of economic vulnerability, human resource weakness (nutrition, health, education, adult literacy) and where gross national income (GNI) per capita, based on a three-year average, is under $750. LDCs are a subset of low income countries.
- Low-income countries (LICs) are those with a per capita GNI of less than US$935 in 2007.
- Lower middle-income countries (LMICs) are those with a per capita GNI of between US$936 and US$3,705 in 2007.
- Upper middle-income countries (UMICs) are those with a per capita GNI of between US$3,706 and US$11,455 in 2007.

FIGURE 15: POPULATION IN DEVELOPING COUNTRIES AFFECTED BY NATURAL DISASTERS



Sources: EMDAT CRED and OECD (income groups are determined by the OECD for 2009 and 2010)

IN FOCUS: DAMAGES AND LOSSES AND THE ECONOMIC IMPACT OF DISASTERS

While the Centre for Research on the Epidemiology of Disasters (CRED) database provides the most comprehensive coverage of disasters, the damage and loss assessment (DaLA) methodology assesses their economic impact far more rigorously, though only for major natural disasters. It usually also identifies priorities for recovery.

The United Nations, World Bank and other stakeholders often use a DaLA methodology to assess the economic impact of major natural disasters, as well as to identify the needs of recovery. Since 2003 this methodology has been used 16 times by the UN, World Bank and national partners to gauge the economic impact of disasters in top humanitarian recipients, including five times in Indonesia, after the Haiti earthquake and twice in India. Damage and losses can be significant: for example, Haiti suffered US$7.8 billion in losses due to the January 2010 earthquake, while Cyclone Nargis caused US$4.1 billion of damage in Myanmar. The 2004 Indian Ocean tsunami caused US$10.8 billion of damage and losses across the four countries assessed. The five disasters assessed in Indonesia incurred damages and losses amounting to US$9.4 billion in total.

TABLE 9: THE GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR) GLOBAL DISASTER DAMAGE AND LOSS DATABASE

YEAR	COUNTRY	NAME	ALL TERMS	DAMAGE (US$m)	LOSSES (US$m)	TOTAL (US$m)
2010	Haiti	Haiti earthquake 2010	Earthquake	4,245.3	3,517.3	7,762.6
2004	Indonesia	Indonesia tsunami 2004	Tsunami	3,371.5	1,765.4	5,136.9
2008	Myanmar	Cyclone Nargis Myanmar 2008	Hurricane/cyclone/storm	1,773.1	2,328.2	4,101.3
2001	India	Gujarat (India) earthquake 2001	Earthquake	2,609.9	802.1	3,412.0
2006	Indonesia	Indonesia earthquake 2006	Earthquake	2,637.1	739.3	3,376.4
2005	Pakistan	Pakistan earthquake 2005	Earthquake	2,549.6	645.0	3,194.6
2004	Thailand	Thailand tsunami 2004	Tsunami	587.3	1,950.0	2,537.3
2007	Bangladesh	Cyclone Sidr Bangaldesh 2007	Hurricane/cyclone/storm	1,211.3	540.6	1,752.0
2004	Sri Lanka	Sri Lanka tsunami 2004	Tsunami	1,320.0	357.7	1,677.7
2004	India	India tsunami 2004	Tsunami	663.5	748.8	1,412.3
2008	Haiti	Hurricane Gustave Haiti	Hurricane/cyclone/storm	458.6	435.4	894.0
2009	Indonesia	West Java quake 2007	Earthquake	760.8	20.3	781.1
2000	Mozambique	Floods Mozambique 2000	Flood	304.6	357.9	662.5
2010	Indonesia	Indonesia volcanic eruption 2010	Volcanic eruption	126.5	343.3	469.8
2004	Haiti	Hurricane Jeanne Haiti 2004	Hurricane/cyclone/storm	210.3	91.1	301.4
2006	Indonesia	Aceh floods 2006	Flood	195.9	30.4	226.2
2007	Indonesia	West Sumatra quake 2007	Earthquake	172.9	2.8	175.6
2010	Sri Lanka	Floods Sri Lanka 2010	Flood	23.4	27.2	50.6

Note: Table contains outcomes of post-disaster damage and loss assessments carried out by various international organisations. Source: GFDRR

GOVERNMENT REVENUES AND DRR

Data on national capacity to reduce the risk of natural disasters is at present very limited. Despite the work done through the Hyogo Framework for Action (HFA), there is only partial, piecemeal information available on just a few developing countries. Government revenues do provide us with a proxy of national capacity, however, and indicate which countries could have finances available to fund DRR.

Differences between countries are again evident. Some have significant revenues based on very large economies, such as Indonesia, Iran and India. Some are major commodity producers, while others are at the other end of the scale – such as Liberia, Afghanistan and Burundi, each of which features in the top five for aid dependency on a yearly basis. Government revenues range from the US$267.6 billion of India in 2010 to the US$253 million of Sierra Leone.

The figures for revenues per person tell a different story than simple volumes. Lebanon generates nearly US$2,000 from each of its citizens, followed closely by Bosnia-Herzegovina, Angola and Algeria. Some of the top 40 humanitarian recipients generate very little revenue at all per person. Fourteen countries produced less than US$100 per person in 2010.

On the positive side, growth in government revenue has been remarkably robust, even during the worst of the financial crisis. Of those 14 countries that generated less than US$100 per person in government revenue, only four did not see growth in revenues year on year from 2006 to 2010. Only in 2009 were there marked drops in revenues in many countries, and most of those were major commodity producers – Algeria, Iraq, Sudan and Angola – which suffered due to the sharp dip in prices from 2008 peaks. Thirteen countries suffered no decline at all over the five years.

The relationship between government revenues and mortality risk is revealing. Of those same 14 countries that generated less than US$100 of revenue per person in 2010, two are ranked as major risk (level nine) for mortality, one is ranked as very high (eight) and five are ranked as medium-high (six). All these countries have significant risk of mortality from natural disaster, but have very little revenue available to reduce risk.

The level of funding available for DRR is obviously key. It would be expected that the greater the government revenue in general, the less DRR financing would have to come from external sources such as international aid. The picture for DRR funding when compared against government revenues is very mixed, however. We do not see, for example, that those 14 countries with less than US$100 per person in revenue are the ones that have received the bulk of DRR funding over the decade.

In fact, only two of them received over US$100 million in that period (Ethiopia and Bangladesh). The rest received less than US$50 million. Some of these countries, those in sub-Saharan Africa in particular, have received almost no DRR funding at all, despite the risks and their lack of revenue. For example, Sierra Leone received just US$3.8 million over the decade, Eritrea US$1.3 million, Côte d'Ivôire US$1.2 million and Guinea US$2.4 million.

TABLE 10: GOVERNMENT REVENUES IN TOP 40 HUMANITARIAN RECIPIENTS

COUNTRY	2005 (US$bn)	2006 (US$bn)	2007 (US$bn)	2008 (US$bn)	2009 (US$bn)	2010 (US$bn)	MORTALITY RISK	GOVT REV PER PERSON 2010	DRR (US$m)
Lebanon	4.5	5.0	5.7	6.9	8.4	8.3	5	1,955	3.1
Bosnia-Herzegovina	4.7	5.6	6.8	8.1	7.3	7.2	5	1,925	1.3
Angola	12.4	21.0	27.7	42.8	23.3	36.0	4	1,896	3.0
Algeria	38.2	50.1	53.2	80.3	50.7	62.3	7	1,760	0.2
Iraq	0.0	33.6	45.0	66.4	44.8	55.3	5	1,757	53.7
Serbia	9.9	11.4	16.4	19.5	16.4	15.0	5	1,523	1.9
Colombia	37.0	42.8	56.5	61.1	61.0	69.7	9	1,505	4.4
Iran	45.7	66.4	87.8	89.3	82.9	97.5	8	1,299	1.8
Thailand	39.6	45.8	52.9	58.0	54.7	65.9	5	968	2.8
Jordan	3.2	4.4	5.0	5.6	5.9	6.0	3	923	0.5
Georgia	1.2	2.0	2.9	3.5	2.9	3.0	5	716	23.0
Syria	7.9	8.5	9.2	10.6	12.9	13.1	5	580	1.5
Indonesia	53.9	72.6	81.9	107.4	87.4	119.1	9	512	754.6
Sri Lanka	3.4	4.4	4.8	5.6	5.5	6.8	5	332	110.5
Sudan	4.2	7.5	9.3	12.4	8.3	10.3	6	239	15.9
India	147.4	174.9	240.6	249.0	226.6	267.6	9	220	639.4
Zambia	1.3	1.8	2.1	2.7	2.0	2.9	4	217	82.8
Haiti	0.6	0.6	0.9	1.0	1.2	1.9	6	191	64.7
Kenya	4.0	4.7	6.0	6.6	6.7	7.8	5	190	143.4
Zimbabwe	0.9	0.5	0.2	0.1	0.9	2.2	5	174	16.5
Chad	0.4	0.9	1.6	2.2	1.1	1.9	5	169	7.3
Pakistan	15.2	18.0	21.5	23.9	23.5	24.8	8	134	1,002.3
DRC	0.8	1.1	1.5	2.1	1.9	2.5	7	115	15.1
Mozambique	0.9	1.1	1.3	1.6	1.8	1.9	6	82	46.9
Liberia	0.1	0.1	0.2	0.2	0.2	0.3	5	80	1.2
Tanzania	1.6	1.8	2.1	3.0	3.4	3.6	5	80	6.7
Guinea	0.4	0.4	0.6	0.7	0.8	0.7	5	70	2.4
Bangladesh	5.6	5.9	6.4	7.2	8.8	11.5	9	70	371.4
Cote d'Ivôire	2.8	3.2	3.8	4.4	4.3	4.5	5	67	1.2
Nepal	0.7	0.7	0.9	1.1	1.3	2.0	6	66	23.5
Uganda	1.1	1.2	1.5	1.8	2.0	2.1	6	62	38.0
Afghanistan	0.0	0.6	0.7	0.8	1.3	1.7	8	60	49.8
Eritrea	0.3	0.3	0.3	0.3	0.2	0.3	4	54	1.3
Ethiopia	1.8	2.2	2.5	3.2	3.9	4.2	6	49	140.7
Myanmar	0.7	1.0	1.3	1.7	1.8	2.5	9	49	19.5
Sierra Leone	0.2	0.2	0.2	0.2	0.2	0.3	6	43	3.8
Burundi	0.2	0.2	0.2	0.2	0.2	0.3	5	34	10.2

- More than 20% growth
- 0 to 20% growth
- 0 to -10% growth
- -10 to -20% growth
- Less than -20% growth

Notes: 1) This table does not include DPRK, Palestine/OPT or Somalia due to lack of data on government resources. 2) Government revenues are made by a tax component and a non-tax one (revenue coming for example from sovereign wealth funds and state-owned enterprises and corporations). They include also fees, fines and mineral and resource rights. Sources: IMF Regional Outlooks (2011), IMF World Economic Outlook (2011), OECD DAC and UNISDR[6]

IN FOCUS: UNDERSTANDING NATIONAL SPENDING ON DRR

TABLE 11: REPORTED NATIONAL RESOURCES SET ASIDE FOR DRR BY TOP 40 HUMANITARIAN RECIPIENTS

	% ALLOCATED FROM NATIONAL BUDGET	ALLOCATED FROM OVERSEAS DEVELOPMENT ASSISTANCE FUND (US$m)	ALLOCATED TO HAZARD PROOFING SECTORAL DEVELOPMENT INVESTMENTS (US$m)	ALLOCATED TO STAND ALONE DRR INVESTMENTS (E.G. DRR INSTITUTIONS, RISK ASSESSMENTS, EARLY WARNING SYSTEMS) (US$m)	DISASTER PROOFING POST-DISASTER RECONSTRUCTION (US$m)
Mozambique	5.2%	317.2	538.1	28.2	14.8
Zambia	5%	394.5	1.6	0.1	–
Colombia	0.1%	–	–	17.0	1.1
Bangladesh	4.5%	–	1.5	–	–
Pakistan	–	3.6	–	10.0	0.6
Sri Lanka	2.6%	102.2	63.8	6.7	67

Source: Indicator 1.2: The Hyogo Framework for Action dedicated and adequate resources available to implement disaster risk reduction plans and activities at all administrative levels[7]

Obtaining comparable data from national governments on how much they are investing in DRR is at present considerably challenging. Those governments that have signed up to the Hyogo Framework for Action are supposed to declare the financing they have committed for DRR, as dictated by one of their indicators. However, of the top 40 recipients of humanitarian financing, only a handful have reported funding in 2009–2011. Whether this is a reporting issue or is due to lack of financing is difficult to gauge.

Indonesia, which unlike the other countries above, reported no financial data to the HFA during the three years, has a well-developed DRR programme and a detailed breakdown of finances. Its planned DRR expenditure of US$7.5 billion over five years comes from a variety of sources, both government and private sector, domestic and international.

TABLE 12: BUDGET FOR INDONESIA'S NATIONAL DISASTER MANAGEMENT PLAN, 2010-2014

INDONESIA'S NATIONAL DISASTER MANAGEMENT PLAN	BUDGET (US$bn)
Enhancement of regulatory framework and institutional capacity	3.6
Integrated disaster management planning	0.0
Research, education and training	0.0
Capacity building and improvement of people's and stakeholders' participation in DRR	0.3
Disaster prevention and mitigation	0.8
Early warning system	0.1
Preparedness	0.9
Emergency response	0.1
Rehabilitation and reconstruction	1.7
Total	**7.5**

Note: Presentation given by Dr. Suprayoga Hadi from the Indonesian Ministry of National Development Planning at a workshop on the Tracking of DRR and Recovery Investment Data with International Aid in 2011; sources of funding include the government, foreign loans, foreign grants and the private sector.
Source: Republic of Indonesia, National Disaster Management Plan, 2010-2014[8]

THE INADEQUACY AND INEQUITY OF DRR FINANCING

INEQUITIES ACROSS SIMILAR CONTEXTS

Unequal spending across countries is not necessarily indicative of inequity, especially given the range of countries amongst the top recipients of humanitarian assistance. Further analysis against population figures reveals, however, that considerable inequity does exist.

TABLE 13: COMPARISONS BASED ON DRR FUNDING PER PERSON IN TOP 40 HUMANITARIAN RECIPIENTS

	DRR PER PERSON (AVERAGE 2000-2009 POPULATION)	AVERAGE PROPORTION PEOPLE AFFECTED EACH YEAR	NUMBER OF DISASTERS	MORTALITY RISK
Zambia	7.10	3.6%	21	4
Haiti	6.94	1.2%	40	6
Pakistan	6.14	0.8%	67	8
Sri Lanka	5.68	3.0%	24	5
Georgia	5.13	1.6%	8	5
Kenya	4.04	3.1%	53	5
Indonesia	3.44	0.5%	152	9
Bangladesh	2.45	4.8%	84	9
Mozambique	2.28	4.8%	45	6
Afghanistan	2.05	2.4%	83	8
Iraq	1.92	0.0%	9	5
Ethiopia	1.90	3.9%	45	6
Burundi	1.39	4.3%	31	5
Uganda	1.34	1.0%	37	6
Zimbabwe	1.32	6.8%	21	5
Somalia	1.20	6.7%	40	5
Palestine/OPT	1.14	0.0%	1	2
Nepal	0.87	1.1%	27	6
Lebanon	0.77	0.0%	3	5
Chad	0.74	3.6%	22	5
Sierra Leone	0.74	0.0%	9	6
India	0.57	5.3%	186	9
Sudan	0.42	2.0%	36	6
Myanmar	0.41	0.6%	14	9
Bosnia and Herzegovina	0.34	0.9%	14	5
Liberia	0.34	1.6%	11	5
DPRK	0.34	0.7%	13	6
Eritrea	0.29	3.9%	3	4
Guinea	0.26	0.3%	16	5
DRC	0.26	0.1%	64	7
Serbia	0.19	0.0%	4	5
Angola	0.18	0.6%	35	4
Tanzania	0.17	1.5%	39	5
Colombia	0.10	1.0%	50	9
Jordan	0.09	0.3%	4	3
Syrian Arab Republic	0.08	0.7%	5	5
Côte d'Ivôire	0.06	0.0%	13	5
Thailand	0.04	4.3%	54	5
Iran	0.03	0.3%	53	8
Algeria	0.01	0.1%	36	7

Note: Colour-coded cells indicate where those countries are in the top ten for the various elements. Sources: Development Initiatives based on OECD DAC, CRED and ISDR

Again, analysis reveals a concentration of DRR financing within a few countries. Over the decade the top five recipients of DRR per person received as much as the other 35 countries combined. This inequity is particularly worrying given how unrelated it appears to be to various proxies of investment need. Only one of the top ten countries for DRR financing – Bangladesh – made it into the top ten for number of people affected, number of disasters and mortality risk. Meanwhile, only two of the top ten countries ranked by people affected are also top ten recipients of DRR financing. Only five of the top ten ranked by number of disasters and four of the top ten ranked by mortality risk are recipients of DRR financing.

Zimbabwe and Somalia have had a yearly average of 6.8% and 6.9% respectively of their populations affected by natural disasters. Burundi has had 4.3%. Yet none of these countries are in the top ten for DRR funding. Mortality risk would appear to drive more DRR financing, with Pakistan, Indonesia, Bangladesh and Afghanistan, all ranked high-risk, in the top ten. However, Myanmar (ranked as a major mortality risk), and DRC (high) have received very little funding at all, just 41 cents and 26 cents per person respectively over the decade.

There is a question to be asked about whether Zambia, Georgia and Sri Lanka are appropriate priorities for funding, given that they do not appear in any of the top ten proxies of need. This may be somewhat misleading, however, given that overall funding levels are so low. The US$7.1 per person spent on DRR per person in Zambia over the decade is hardly an indicator of significant priority being given to the reduction of risk. A question that should be asked, but that appears to have no clear answer at present, is how much is an appropriate level of investment in DRR, and on what should that investment be based?

HUMANITARIAN INEQUITY

TABLE 14: AVERAGE AMOUNT OF HUMANITARIAN ASSISTANCE PER PERSON, 2000-2009

COUNTRY	AVERAGE HA PER PERSON
Palestine/OPT	1,680.0
Lebanon	431.5
Somalia	296.6
Liberia	269.1
Jordan	229.3
Sudan	223.6
Afghanistan	202.2
Eritrea	192.1
Iraq	180.2
Burundi	157.8

Sources: OECD DAC and UN population figures (downloaded November 2010)

DEVELOPMENT AID INEQUITY

TABLE 15: AVERAGE AMOUNT OF DEVELOPMENT ASSISTANCE PER PERSON, 2000-2009

COUNTRY	AVERAGE ODA PER PERSON
Palestine/OPT	4,466.1
Bosnia and Herzegovina	1,766.5
Jordan	1,367.8
Lebanon	1,301.5
Serbia	1,247.0
Iraq	1,206.0
Afghanistan	1,182.7
Georgia	1,021.9
Liberia	846.1
Zambia	812.1

Sources: OECD DAC and UN population figures (downloaded November 2010)

GENERAL INEQUITY OF FUNDING

Similar inequities exist elsewhere within aid financing. The people of Palestine/OPT received US$1,680 per person over the decade, four times as much as in Lebanon, the country ranked second in terms of average humanitarian assistance per person. The disparity is similarly evident for development aid, where the Palestinian population is once more ranked first for financing per person: US$4,466 was received, more than 2.5 times higher than second-placed Bosnia-Herzegovina.

OVERALL FIGURES MASK INADEQUACIES: BY COUNTRY

The generally inadequate level of investment in DRR, with year on year volumes dominated by single projects, is further revealed through an analysis of funding trends in individual countries.

ETHIOPIA DRR PROFILE

Ethiopia has been in and out of the disaster headlines ever since the famine of the mid-1980s. A massive drought in 2003 affected more than 12 million people and the 2011 famine was a reminder that underlying issues have still not been resolved. More regular though less severe natural disasters include the yearly flooding, which usually affects more than 100,000 people, and volcanic eruptions. The country has 65 volcanoes, 25 of which have 100,000 people living within a 30km radius.[9] Mount Erta Ale erupted in 2005, displacing thousands of people.

Funding for Ethiopia was US$140.7 million over the decade (making it the 6th largest recipient), but its large population made it only 12th highest in terms of per person funding. Despite the major droughts, and the country being a major recipient of development aid, the proportion of ODA for DRR has been only 0.6%. The 2007 peak in funding is explained by a World Bank "productive safety net" programme of US$51 million, which was designed to help Ethiopians be more resilient to drought and to respond to it more effectively.

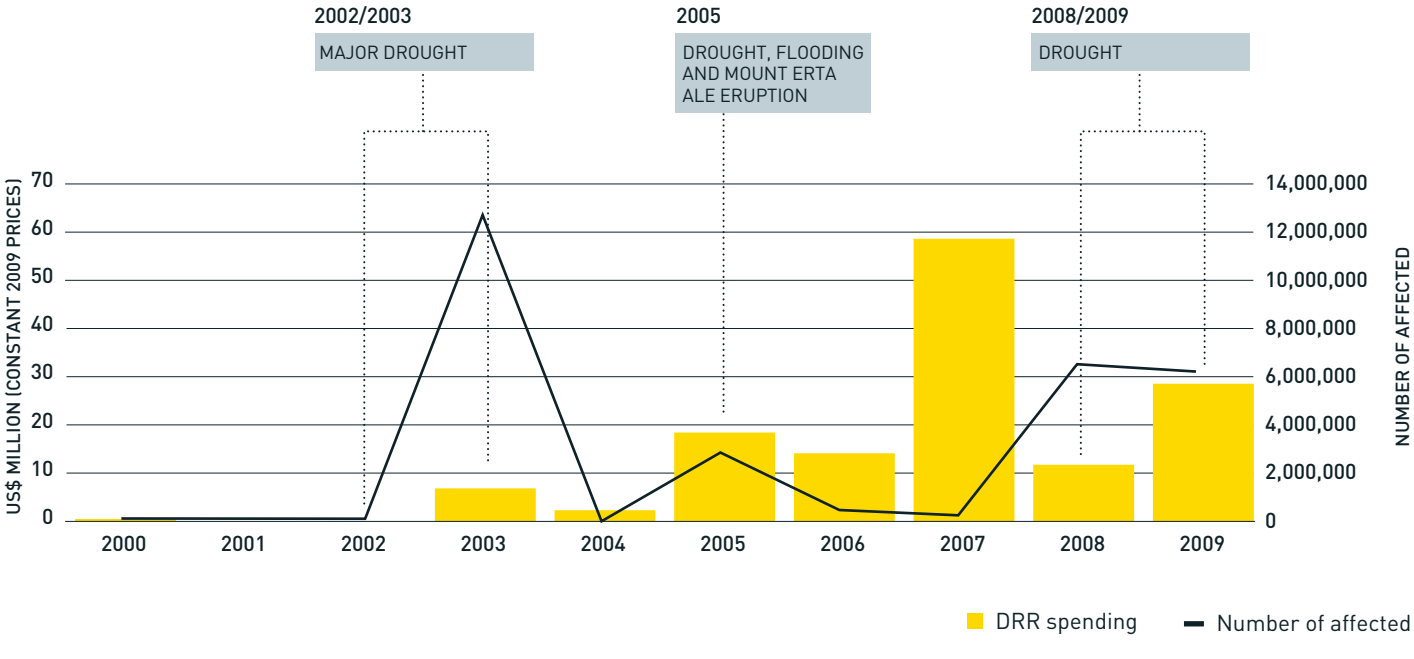
TABLE 16: NUMBER OF PEOPLE AFFECTED BY NATURAL DISASTERS IN ETHIOPIA BY DISASTER TYPE

YEAR	DROUGHT	EPIDEMIC	FLOOD	VOLCANO
2000	-	7,033	30,000	-
2001	-	8,166	39,500	-
2002	-	-	4,000	-
2003	12,600,000	-	110,000	-
2005	2,600,000	964	242,418	9,000
2006	-	32,848	434,050	-
2007	-	-	245,386	2,000
2008	6,400,000	3,134	115,595	-
2009	6,200,000	13,652	-	-
2010	-	967	80,700	-
2011	4,805,679	-	-	-
Total	**32,605,679**	**66,764**	**1,301,649**	**11,000**

Source: EMDAT CRED

This accounted for 86% of total DRR spending in that year. The 2009 peak was largely made up of a single US$16 million donation from Canada through the World Food Programme (WFP), for a mix of food provision and resilience. A low overall figure therefore is compounded by a DRR financing trend that starts off as non-existent and then varies considerably, but this may be in part due to the availability of data. If the World Bank project was stretched over several years, the variability in DRR trends may be reduced.

FIGURE 16: DRR FUNDING AND NATURAL DISASTERS IN ETHIOPIA



Source: Development Initiatives based on OEDCD DAC and EMDAT CRED

HAITI DRR PROFILE

Haiti suffers from multiple natural hazards that almost always become disasters. Though the earthquake of 2010 had one of the greatest impacts of any disaster anywhere over the last decade, typhoons and flooding are more regular threats to Haitians.

The earthquake appears very obviously in Haiti's overall disaster profile. In terms of number of people affected, the country ranked 8th highest in 2010, pushing it into 30th position over the 11 years. The earthquake, the disaster that killed the most people of any single event over all 11 years, pushed it into first place for number of deaths (prior to 2010 it ranked 17th).

Though Haiti received only the ninth highest volume of DRR funding over the decade, this was equivalent to the second highest (US$6.94) per person, although once more this was a very poor proportion of aid – just 1.3% over the decade.

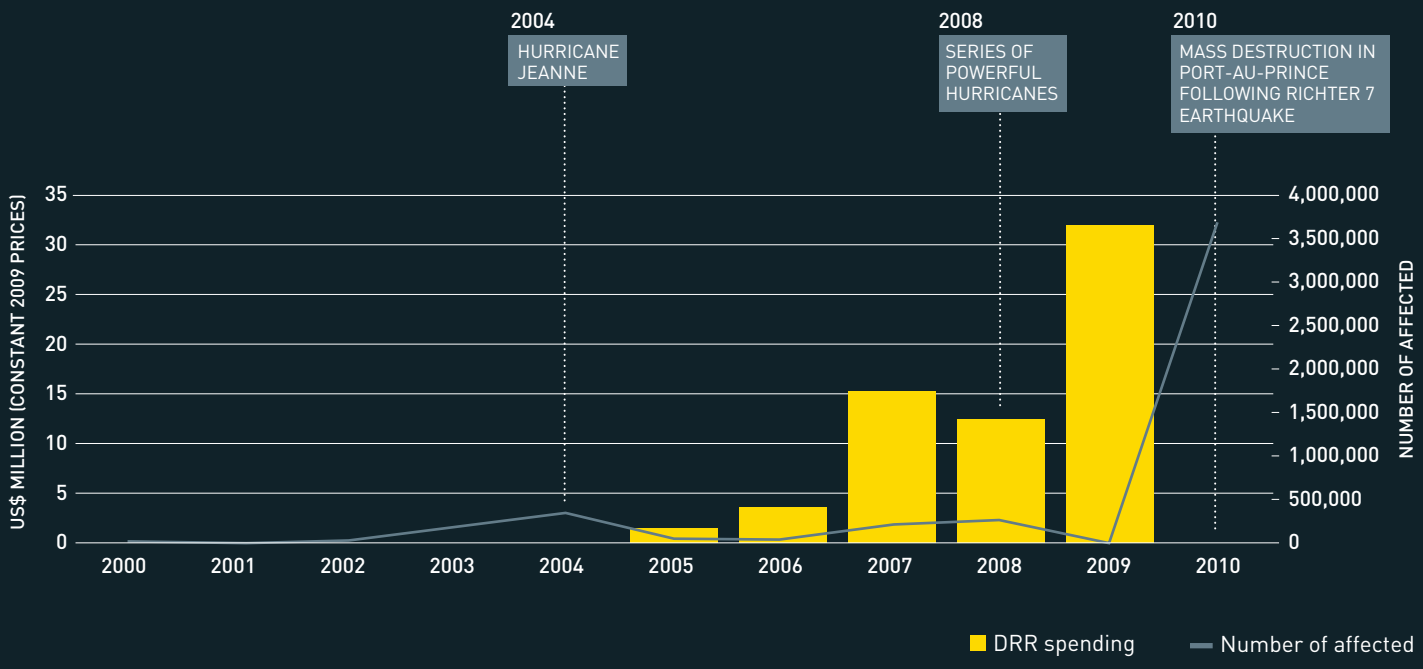
Like Ethiopia, Haiti received little or no funding at all before a major disaster struck, with the 2004 storms prompting a very small investment of US$1.5 million in 2005. Funding in 2007, 2008 and 2009 suggested a general increase, even before the massive earthquake of 2010. However, even funding of US$30 million in 2009 was hardly enough preparation for a country like Haiti with such a high mortality risk and such low government capacity and revenues. Despite the threat of an earthquake being high in and around the capital Port-au-Prince, and the risk of death and damage being massive, there was little evidence of any significant investment in reducing the risk in urban areas.

TABLE 17: DISASTER NUMBERS IN HAITI

	2000-2010	RANK
Number of disasters	47	26/201
Average number of disasters per year	4	–
Number affected	4,775,265	30/201
Average affected	434,115	–
Number of deaths	234,846	1/201
Average number of deaths	21,350	–

Source: EMDAT CRED

FIGURE 17: DRR FUNDING TO HAITI AGAINST DISASTER IMPACT



Note: 2010 DRR data not available. Source: Development Initiatives based on OECD DAC and EMDAT CRED

ZAMBIA DRR PROFILE

Zambia is regularly affected by flooding in particular, with major disasters in 2001, 2007 and 2009. There was also a major drought in 2005.

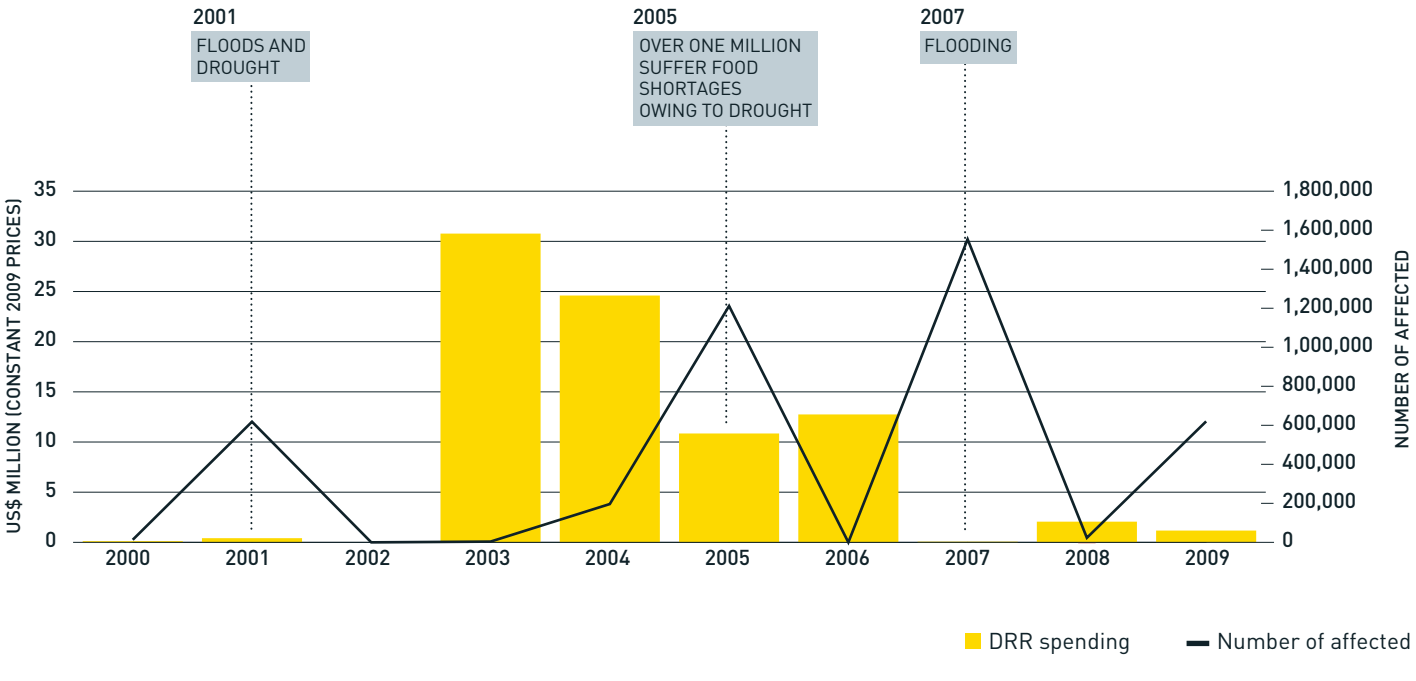
Despite not being ranked high either for the proportion of its population affected, the number of disasters or its mortality risk, Zambia received the eighth highest volume of DRR over the decade and was placed first in terms of per person funding. However, Zambia's financing trend over the decade is worrying, perhaps even more so than the funding to Ethiopia and Haiti, which is generally rising. There was a sudden and initial high figure of more than US$30 million in 2003, followed by another high year with close to US$25 million in 2004. This was almost totally accounted for by a World Bank emergency drought recovery project that incorporated resilience and disaster management components. However, there were much lower DRR figures in 2005 and 2006. For the remainder of the decade there was hardly any DRR financing at all, despite repeated natural disasters.

TABLE 18: NUMBER OF PEOPLE AFFECTED BY DISASTER TYPE IN ZAMBIA

	DROUGHT	EPIDEMIC	FLOOD
2000	-	1,224	12,000
2001	-	425	617,900
2003	-	3,835	-
2004	-	-	196,385
2005	1,200,000	7,615	4,000
2006	-	105	-
2007	-	115	1,553,521
2008	-	8,312	5,000
2009	-	5,198	614,814
2010	-	-	1,200
Total	**1,200,000**	**26,829**	**3,014,820**

Source: EMDAT CRED

FIGURE 18: DRR FUNDING AND DISASTER IMPACT IN ZAMBIA



Source: Development Initiatives based on OECD DAC and EMDAT CRED

OVERALL FIGURES MASK INADEQUACIES: BY DISASTER TYPE

FLOODING: MORE DEATHS BUT MUCH LESS FINANCING

Flooding is one of the most regular and damaging natural disasters. The top 40 humanitarian recipients include many countries that suffer regular annual flooding, such as Bangladesh, Mozambique, Sudan and Pakistan.

The data on the effects of flooding in these countries compared with the flooding-related DRR expenditures received is revealing. Although the top 40 recipients regularly account for the highest proportion of deaths due to flooding (even before the massive Pakistan flood of 2010) and in many years for a sizeable proportion of the people affected, funding in general goes to countries outside the top 40. Only in 2000 and 2001 have the top 40 received more than 50% of all flood-related DRR funding. For the years 2003 to 2009, the figure never crept above 38%. In 2005 it was only 6.7%.

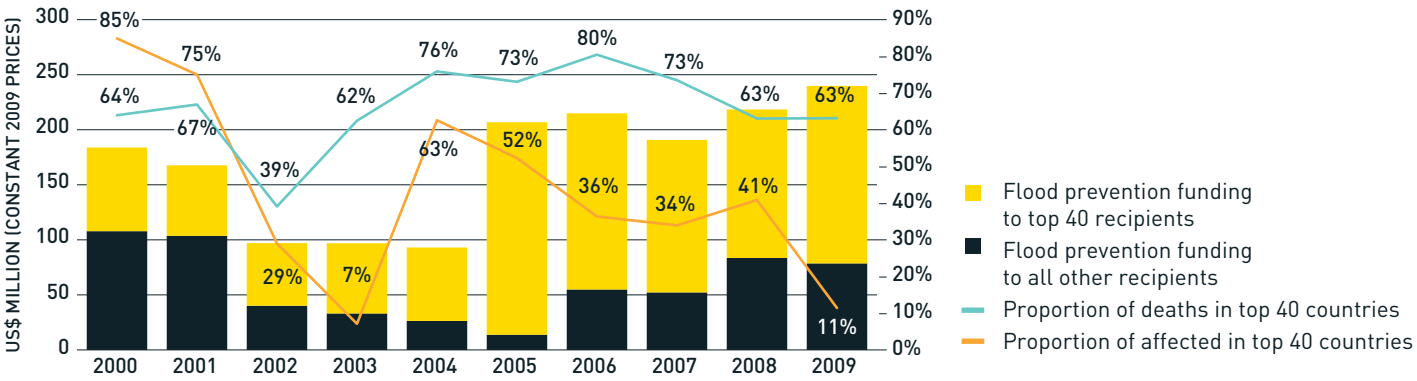
Unsurprisingly then, only four of the top 40 humanitarian recipients make it into the top ten for overall flood-related funding, even though they include seven of the top ten by numbers of people affected by floods. Five countries make it into the top ten for flood prevention control even though they are not in the top ten for flood-affected people (Sri Lanka, Cambodia, Guyana, Yemen, Indonesia).

TABLE 19: THE TOP 10 COUNTRIES AFFECTED BY FLOODING AND FUNDING FOR FLOOD PREVENTION AND CONTROL IN TOTAL ODA, 2000-2009[10]

	NUMBERS AFFECTED BY FLOODING	FLOOD PREVENTION AND CONTROL FUNDING (US$m)
China	525,638,382	383.3
India	238,290,253	46.2
Bangladesh	58,601,793	33.6
Thailand	13,026,034	1.3
United States	11,317,806	0
Vietnam	10,961,710	136.8
Pakistan	9,562,092	13.1
Cambodia	6,644,182	29.9
Mozambique	6,212,111	27.3
Colombia	4,488,063	0.8

Note: Figures are in US$ million constant 2009 prices. Sources: OECD DAC and EMDAT CRED

FIGURE 19: COMPARING FUNDING FOR FLOOD PREVENTION AND CONTROL AND FLOODING IMPACT BETWEEN THE TOP 40 HA RECIPIENTS AND ALL OTHER RECIPIENTS



Sources: OECD DAC and EMDAT

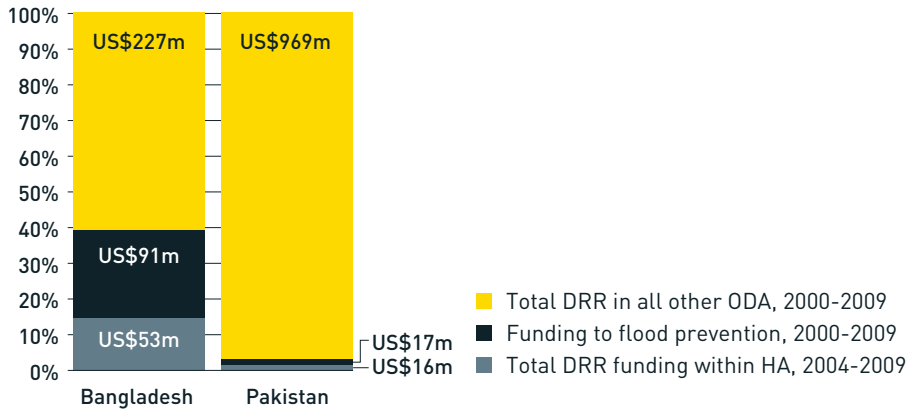
FLOODING IN BANGLADESH AND PAKISTAN

Between 2000 and 2011 Bangladesh and Pakistan had the highest numbers of people affected by flooding of all countries (excluding China and India). They accounted for 41% of all those affected by floods over this period, or four out of every ten people.

Pakistan had only 9.6 million people affected up until 2010, but the massive floods in that year pushed its total to 35.7 million for the period as a whole. In Bangladesh over this period a total of 58.6 million people were affected. The 2004 flooding in Bangladesh was particularly severe, worse even than the 2010 flooding in Pakistan, with more than 60% of the country covered with water and 37 million people affected.

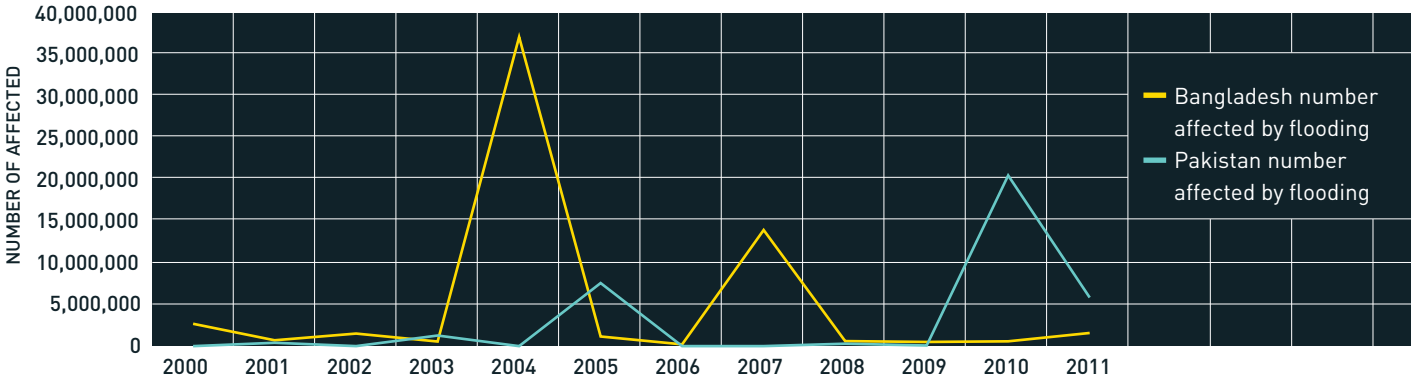
The need for DRR investments connected to flooding is therefore quite obvious. However, the funding response from international donors has not been at all substantial. Of Bangladesh's US$371.4 million of DRR funding over the decade, only US$91 million, or just 25%, was directly related to flooding. For Pakistan the figure is much worse. Despite receiving over US$1 billion for DRR, the highest of any of the top 40 recipients over the decade, only 2% of this, just US$16 million, was directly related to flooding.

FIGURE 21: BREAKDOWN OF DRR FUNDING FOR BANGLADESH AND PAKISTAN



Note: Figures are in constant 2009 prices. Source: Development Initatives based on OECD DAC

FIGURE 20: NUMBER OF PEOPLE AFFECTED BY FLOODING IN PAKISTAN AND BANGLADESH



Source: EMDAT CRED

CONCLUSION: SPENDING WHERE IT SHOULD COUNT

A number of key lessons can be drawn from a detailed examination of financing for DRR in relation to the contexts that need it most.

The first and most obvious one is that the data itself, although revealing of trends, needs considerable improvement in order to give a true picture of DRR financing.

Secondly, the general balance of assistance appears to be wrong. Only 19 of the top 40 humanitarian recipients are also in the top 40 for overall development aid. This suggests that too many countries are missing out on the long-term development financing that is considered a prerequisite for DRR in our bifurcated model of aid. Worryingly, in the year with the best data available (2009), seven out of every ten dollars spent on DRR came from humanitarian funds. This would suggest that the pressure on humanitarian financing is unlikely to diminish.

Major humanitarian recipients are particularly affected by natural disasters. Many of them are poor countries and many of them are affected by conflict. They are extremely vulnerable to shocks. Despite this, funding for DRR is very weak indeed, with only US$3.7 billion out of a total US$363 billion of ODA to the top humanitarian recipients going to reduce disaster risk. This low level of funding is compounded by concentration in a few recipient countries, and detailed country investigation reveals at best variable, and at worst worryingly sporadic, trends over time.

Placing DRR in context reveals considerable inequities across similar country contexts, with funding seemingly going towards countries that have substantial resources of their own; arguably these are the very countries that do not need international DRR assistance. Funding for DRR does not appear to be directed logically to those countries that need it most; it is not based on the number of disasters, the risk of mortality or the proportion of people affected each year. Neither does funding for DRR seem to be obviously related to country revenues, with some of the richer countries receiving considerable funding and many of the poorest ones receiving almost nothing over an entire decade.

Though these country comparisons are important, as clearly there are questions to be asked about DRR priorities, it is, however, the almost negligible investment in DRR overall that is the core issue. The first priority is surely to generate more financing in general, while the second should be the creation and implementation of a financing model based on a proper and cross-country assessment of need.

A final note must be made on the quality of data. That which is available is revealing about the priority, or rather lack thereof, given to DRR. Considerable improvements must be made in the quality of reporting, making sure that this reflects the complexity of DRR programming, in order for a full picture to be drawn and, crucially, for the right decisions to be made. A key element of this is to ensure that country context remains paramount and that international funding for DRR is allocated with that context in mind, and seen as only one part of the overall solution to reducing risk.

POSTSCRIPT: DRR IN THE CONTEXT OF CONFLICT

PEOPLE AFFECTED BY DISASTERS OFTEN LIVE IN CONFLICT-AFFECTED COUNTRIES

Conflict plays a major role in the need for humanitarian assistance, and unsurprisingly the top 40 recipients of such assistance have suffered or continue to suffer from conflict of one kind or another. From 2000 to 2009, 28 of these 40 countries suffered at least seven years of conflict. Four of them suffered from nine years of conflict and ten experienced conflict for the entire decade. Only six countries had no year of conflict at all.

This is particularly significant because of the way in which natural disasters have a particular impact in countries affected by conflict. In each year from 2005 to 2009, conflict-affected countries accounted for more than 50% of people affected. In some years, such as 2006 and 2008, the proportion was around 80%.

Increasingly, attention is being given to the interplay between natural disasters and unnatural conflicts. Whether there is a systematic attempt to reduce conflict risk in the same way as DRR is open to question. Certainly there is no equivalent in conflict risk reduction of the Hyogo Framework for Action for DRR that binds coordinating actors, implementing agencies and national governments together to a framework of commitments. Funding for conflict risk reduction is largely limited to specific post-conflict scenarios that involve donor governments. For example, Afghanistan and Iraq accounted for 25% of all conflict prevention expenditure to the top 40 recipients of humanitarian assistance over the decade.

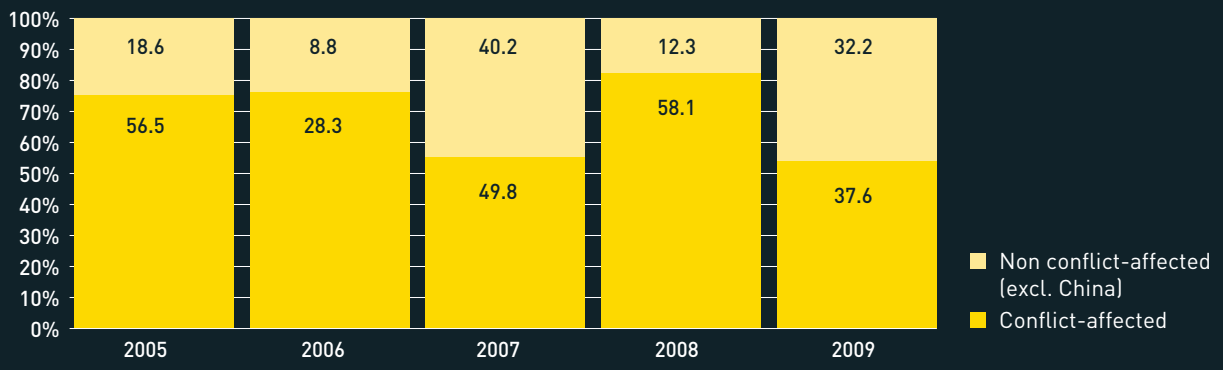
What is particularly significant is again the number of countries that have roughly similar profiles, and that suffer from both natural disasters and conflict, that appear to have very different levels of funding for DRR and conflict prevention. There seems to be no obvious pattern, no clear indication of funding related to need and no clear setting of priorities.

TABLE 20: TOP 10 RECIPIENTS OF CONFLICT PREVENTION FUNDING[11]

	CONFLICT PREVENTION (US$m)	NUMBER OF YEARS IN CONFLICT OVER THE LAST 10	MORTALITY RISK
Afghanistan	2,266.4	10	8
Iraq	2,146.0	10	5
Serbia	1,071.8	7	5
Sudan	803.5	10	6
Timor-Leste	557.6	6	6
Bosnia-Herzegovina	541.6	6	5
DRC	456.3	10	7
Liberia	307.1	10	5
Angola	262.6	7	4
Colombia	254.7	10	9

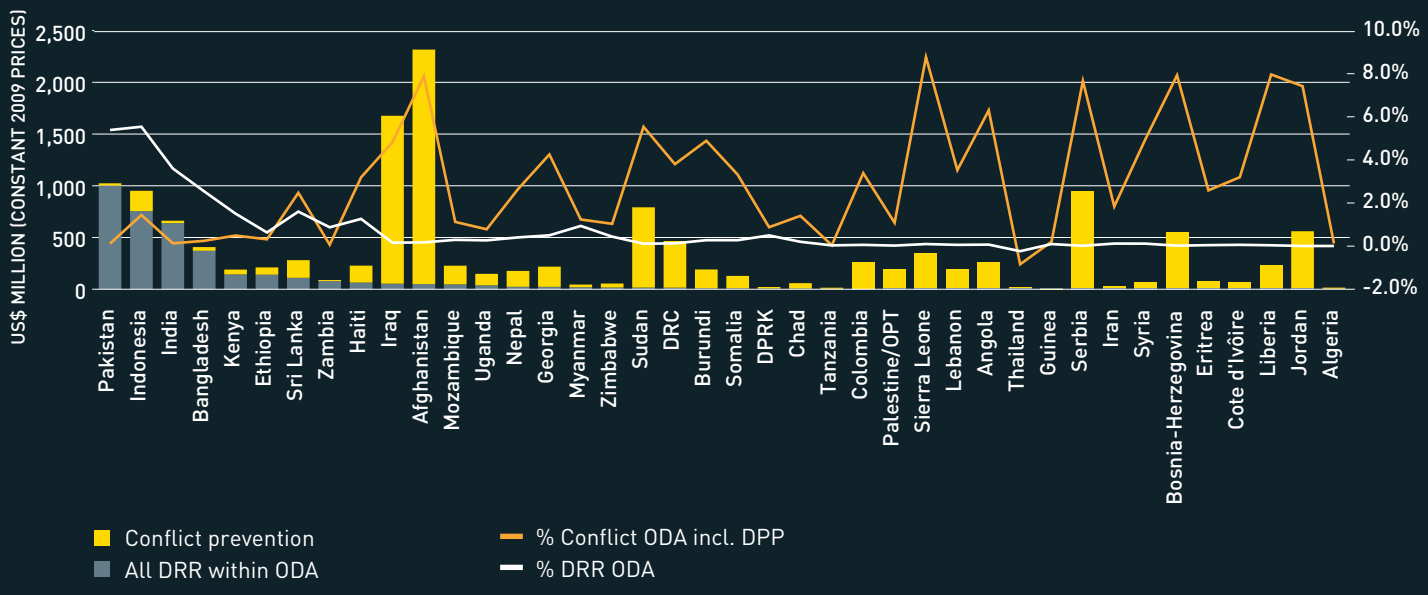
Note: Figures are in US$ million, constant 2009 prices. Sources: Development Initiatives' methodology for conflict-affected, OECD DAC and UNISDR

FIGURE 22: LOCATION OF PEOPLE AFFECTED BY NATURAL DISASTERS



Sources: Development Initiatives' methodology for conflict-affected and EMDAT CRED for disaster-affected

FIGURE 23: INVESTMENTS IN CONFLICT PREVENTION AND DRR FROM THE TOP HUMANITARIAN RECIPIENTS



Source: Development Initiatives based on OECD DAC

DISASTER-AFFECTED/CONFLICT-AFFECTED COUNTRIES IN SUB-SAHARAN AFRICA

The 2011 Horn of Africa drought and famine provide an example of the interplay between natural disaster and conflict. Each of the five countries most affected suffers from yearly natural disasters, and each has suffered or is currently suffering from conflict.

Humanitarian funding has been significant for all countries and overall aid has been particularly high for Ethiopia and Uganda. Funding to reduce risk has been minimal, however, with only US$288.6 million spent on DRR and US$418.4 million on conflict prevention.

TABLE 21: TOTAL AID, DRR AND CONFLICT PREVENTION EXPENDITURE AGAINST DISASTER IMPACT AND RISK IN HORN OF AFRICA COUNTRIES

	RISK			AID		DRR EXPENDITURE		CONFLICT PREVENTION	
	NUMBER OF YEARS CONFLICT-AFFECTED	MULTIPLE MORTALITY RISK CLASS	AVERAGE NO. AFFECTED	HUMANITARIAN ASSISTANCE (US$m)	TOTAL ODA (US$m)	ALL DRR WITHIN ODA (US$m)	% ODA TO DRR	CONFLICT PREVENTION (US$m)	% ODA TO CONFLICT PREVENTION
Eritrea	9	4	170,700	841.3	2,768.7	0.9	0%	71.7	3%
Ethiopia	10	6	2,909,775	4,730.8	22,209.2	123.4	1%	70.2	0%
Kenya	5	5	1,092,237	1,641.1	9,515.2	122.9	1%	46.7	0%
Somalia	10	5	556,457	2,451.9	3,590.3	9.2	0%	119.1	3%
Uganda	10	6	285,839	1,503.9	14,154.0	32.2	0%	110.7	1%
Totals				11,169.0	52,237.4	288.6		418.4	1%

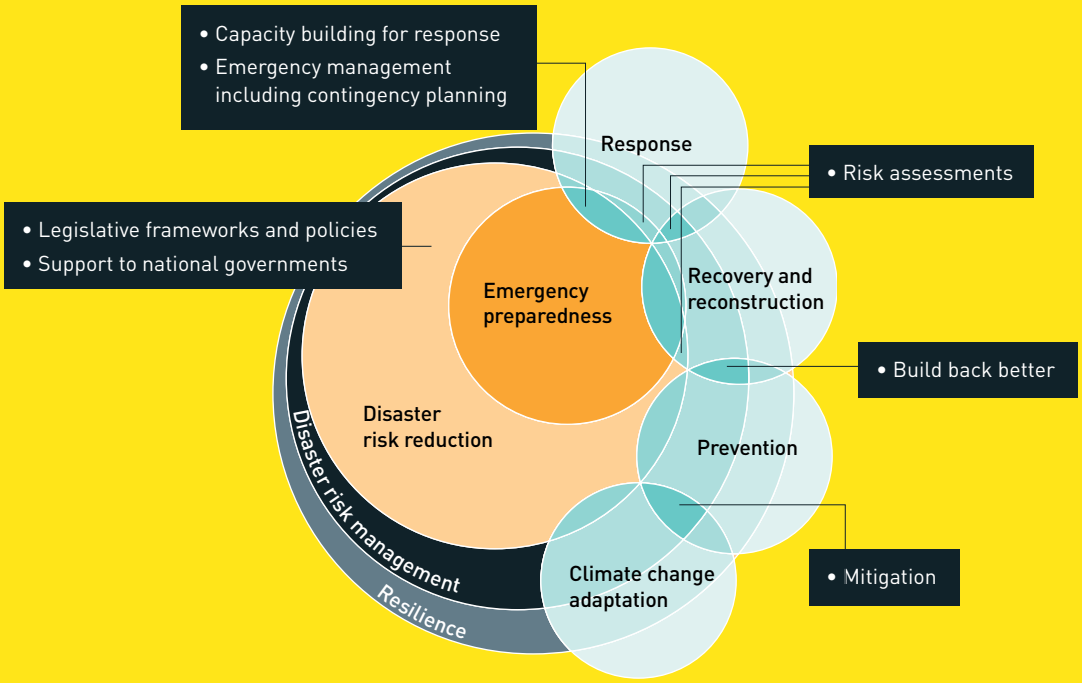
Notes: Financial figures are in constant 2009 prices. Sources: Development Initiatives based on OECD DAC, CRED, UNISDR

ANNEX: DATA AND GUIDES

METHODOLOGICAL NOTES

THE SEMANTICS OF DRR

FIGURE 24: HOW DRR WORKS



Note: The concentric circles denote connections between the various elements of DRR, resilience, emergency preparedness, disaster risk management, response, recovery and reconstruction, prevention and climate change adaption. Source: Development Initiatives report on emergency preparedness prepared for FAO on behalf of the IASC

METHODOLOGY FOR TRACKING DRR IN THE OECD DAC CRS

The OECD DAC Creditor Reporting System (CRS) provides probably the most accurate and easiest way of tracking funding for DRR, as it reports both development and humanitarian aid. The project-level data in the CRS allows particular issues to be examined through sector codes and project descriptions, albeit only through a forensic examination.

In the CRS, funding to a sector relevant to each individual aid activity is recorded using a five-digit purpose code. The coding is intended to identify the specific areas of the recipient's economic or social development that the transfer intends to foster. A purpose code for an element of DRR has existed since 2004; this falls within humanitarian aid under "disaster prevention and preparedness" (DPP).

The data reported under the DPP code (74010) can be easily accessed. However, to search for DRR activities within development and humanitarian programmes (not coded 74010), the short and long project descriptions were used in this report. As searching each individual project description is very time consuming, 29 key terms (in four languages) were used to find projects with elements of DRR. A coding macro using visual basics was developed to search both long and short descriptions with the identified terms.

The search terms were selected from recent literature on DRR and the websites of key DRR-focused organisations (e.g. UNISDR). After running the macro, project descriptions were scanned and those not related to DRR were removed. Column filters on the descriptions were then searched using the same terms as the coded macro to identify any potential DRR-related activities that had not been picked up. All funding reported to the flooding prevention/control development purpose code (41050) was included in the final estimate of DRR.

All OECD DAC data used in this report is expressed in constant 2009 prices and was downloaded in April 2011.

DATA USED FOR DISASTER STATISTICS (NUMBERS OF NATURAL DISASTERS, AFFECTED NUMBERS, DEATHS AND ESTIMATED DAMAGES)

The Centre for Research on the Epidemiology of Disasters (CRED) maintains the International Disaster Database. For a disaster to be entered into the database, at least one of the following criteria must be fulfilled: ten or more people reported killed; 100 people reported affected; a declaration made of a state of emergency; or a call for international assistance. The main sources for events listed are UN agencies, but information also comes from national governments, insurance organisations and the media. The total number of people affected by an event includes those who suffered physical injuries or illness, as well as those made homeless or who otherwise required immediate assistance during a period of emergency. The economic damage figures for disasters are considered to be under-estimates, as only a third of reported disasters estimate economic losses, often due to problems relating to damage assessments.

CONFLICT PREVENTION IN DAC REPORTING

Conflict prevention and resolution, peace and security within ODA includes: security system management and reform; civilian peace-building; conflict prevention and resolution; post-conflict peace-building (UN); reintegration and small arms and light weapons (SALW) control; land mine clearance and child soldiers.

BASIC CONCEPTS AND DEFINITIONS

CONSTANT PRICES

Constant (real terms) figures show how expenditure has changed over time, after removing the effects of exchange rates and inflation. DAC deflators, along with annualised exchange rates, are available at: www.oecd.org/dac. The base rate year used by the DAC during 2011 was 2009.

DEVELOPMENT ASSISTANCE COMMITTEE (DAC)

The DAC is the Development Assistance Committee of the OECD. Its members are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Republic of Korea, Spain, Sweden, Switzerland, the United Kingdom, the United States and the European Commission. These members have "agreed to secure an expansion of aggregate volume of resources made available to developing countries and to improve their effectiveness".

GROSS DOMESTIC PRODUCT (GDP)

The total market value of goods and services produced by workers and capital within a nation's borders.

OFFICIAL DEVELOPMENT ASSISTANCE (ODA)

For the purposes of this report, development aid refers to ODA reported to the OECD DAC. ODA is a grant or loan from an 'official' (government) source to a developing country or multilateral agency for the promotion of economic development and welfare.

It is reported by members of the OECD DAC according to strict criteria each year and by a small number of donors outside of the OECD DAC group, who typically report a less comprehensive dataset. It includes sustainable and poverty-reducing development assistance (for sectors such as governance, growth, social services, education, health, and water and sanitation) as well as funding for humanitarian crises.

ENDNOTES AND REFERENCES

[1] International Monetary Fund, GDP figures come from the Economic Outlooks database of the IMF. http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx

[2] Yugoslavia has been excluded from the list of top 40 humanitarian recipients for the purposes of this report. Thailand has an overall negative figure of ODA over the ten-year period due to debt repayments.

[3] Poorest Areas Civil Society Programme (PACS), Drought in India: Challenges and Initiatives 2001-2008. http://www.empowerpoor.org/downloads/drought1.pdf

[4] Multidimensional Poverty Index, Oxford Poverty and Human Development Initiative. http://www.ophi.org.uk/policy/multidimensional-poverty-index/

[5] The CHFs fund planned humanitarian response for the following year based on strategic planning and identification of needs that include an element of risk analysis and the likely event of an emergency occurring, and therefore address the need to prepare for that emergency. The ERFs are much smaller in scale compared with CHFs and support short-term projects of up to six months' duration.

[6] For countries with no data on government revenues excluding grants, a different methodology has been applied. Grants (data from the OECD DAC) have been subtracted from general government revenues. Data for Haiti refers to government revenues including grants.

[7] Hyogo Framework for Action (HFA) priority for action 1.2 (2009-2011), dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels. http://www.preventionweb.net/english/hyogo/progress/documents/hfa-report-priority1-2(2009-2011).pdf

[8] Indonesian Ministry of National Development Planning, presentation given by Dr. Suprayoga Hadi from the Indonesian Ministry of National Development Planning at a workshop on the Tracking of DRR and Recovery Investment Data with International Aid in 2011. Sources of funding include the government, foreign loans, foreign grants and the private sector. http://www.preventionweb.net/english/professional/trainings-events/events/v.php?id=19655

[9] Aspinall, W., Auker, M., Crosweller, S., Hincks, T.K., Mahony, S., Nadim, F., J. Pooley and Sparks, R.S.J., Syre, E. (2011), *Volcano Hazard and Exposure in Track II Countries and Risk Mitigation Measures - GFDRR Volcano Risk Study*, Bristol University Cabot Institute and NGI Norway for the World Bank.

[10] The OEC DAC defines flood prevention and control activities as 'Floods from rivers or the sea; including sea water intrusion control and sea level rise-related activities'. http://www.oecd.org/dataoecd/28/62/38429349.pdf

[11] Conflict prevention and resolution, peace and security as defined by the OECD DAC; see DAC statistical reporting directive. http://www.oecd.org/dataoecd/28/62/38429349.pdf

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DISASTER RISK REDUCTION

Spending where it should count

In this report we examine the top 40 humanitarian recipient countries in the context of natural disasters and especially with regard to financing to reduce risk. We highlight how prevalent disasters are in these countries, and their particularly significant impact. Beyond this, we examine the current state of funding for disaster risk reduction and, in the context of those countries most at risk of natural disaster, ask questions about the volume and type of funding, and its equity. Are the right choices being made?

Global Humanitarian Assistance (GHA) is a Development Initiative which aims to improve the efficiency, effectiveness and coherence of humanitarian response by further increasing access to reliable, transparent and understandable information on the aid provided to people living in humanitarian crises.

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