

7. Disaster trends and IFRC insights

This section moves away from a thematic review of who is left behind in humanitarian response to take stock of global disaster trends and what they have meant for the IFRC network's disaster risk management efforts over the last ten years. The focus is on disasters, however some of the data also looks at complex emergencies and overall humanitarian needs at a global scale as relevant. It looks first to the available data to see what it reveals about the nature, frequency and location of disaster events and the IFRC's response. Equally important, it looks to the gaps in the available data, and how they might skew an understanding of today's risk environment. It then examines key recent trends in disaster risk management from the IFRC's experience that go "beyond the numbers".

Box 7.1 A note on the two main data sources used in this section

EM-DAT is the Emergency Events Database at the Université Catholique de Louvain. It collects and compiles information on 'natural' and technological disasters from public sources. EM-DAT data does not include war, conflict or conflict-related famine disaster events. Natural disaster data includes: weather-related events (meteorological, such as storms and extreme temperatures; hydrological, such as floods, mudslides and pluvial/flash floods; and climatological, such as droughts and wildfires), geophysical events such as earthquakes, and biological events/epidemics. Data about technological disasters is not included in this analysis.

In previous *World Disasters Reports* EM-DAT data has been presented in tabular format in the annex. This year's report attempts to provide a visual summary of the data, primarily focusing on 2008–2017, with reference to the previous decade (1998–2007). Further details are available in the Data notes or online.

IFRC GO is a publicly available data source that provides information on disasters that have triggered a Disaster Relief Emergency Fund (DREF), emergency appeal or movement-wide appeal. It also contains plans of action, field reports, surge deployments, situation reports etc., and displays these in an easy to use interface as well as through maps, charts and infographics. The IFRC launched the GO platform in 2018 to channel emergency operations information across the Red Cross Red Crescent Network.

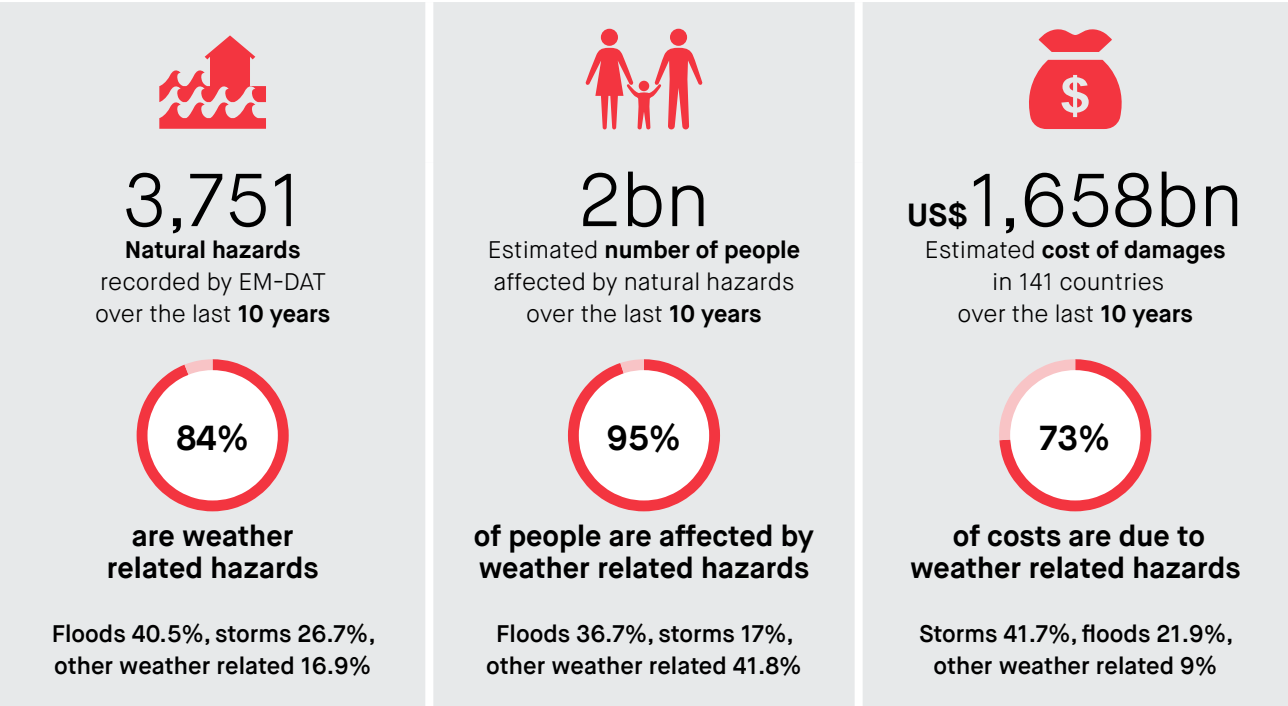
7.1 Disaster trends: looking at the last ten years

7.1.1 What type of disasters are happening and with what impact?

Global data

Over the last ten years (2008–2017), EM-DAT¹ has recorded 3,751 natural hazards – 3,157 (84.2%) of which have weather-related triggers, with floods and storms alone accounting for almost two-thirds of all incidents.

Fig. 7.1 Overview of natural hazards 2008-2017



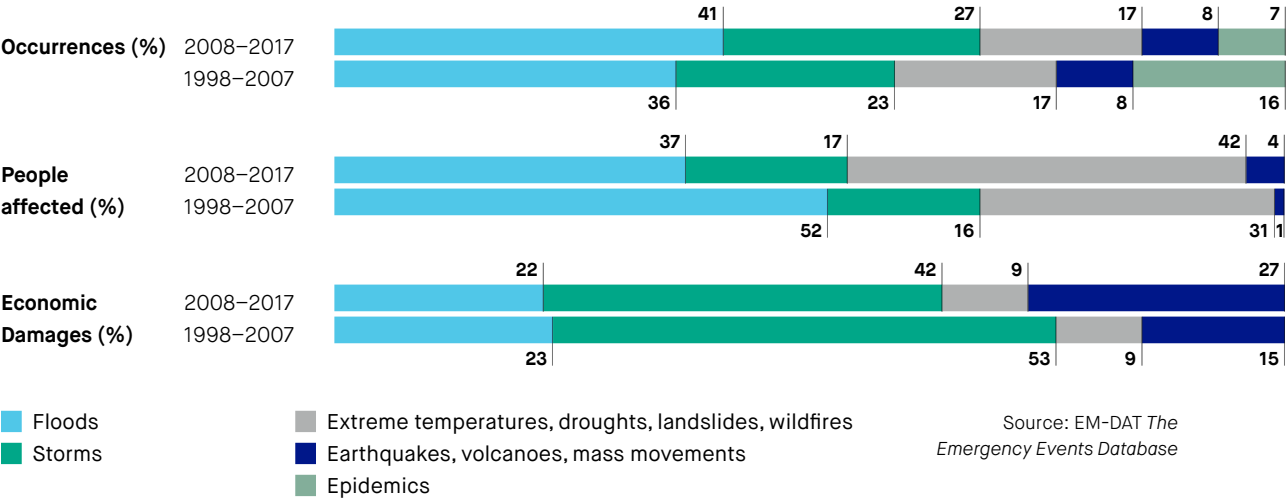
Notes: The total number of natural hazards is based on data for 198 countries/territories. For 17 countries there is no data on people affected. For 57 countries there is no data on estimated cost of damages. This figure does not include damages due to epidemics.

Source: EM-DAT: the Emergency Events Database - Universite Catholique de Louvain (UCL)/CRED, D.Guha-Sapir – www.emdat.be, Brussels, Belgium "EM-DAT The Emergency Events Database"

1. EM-DAT: the Emergency Events Database - Universite Catholique de Louvain (UCL) / CRED, D.Guha-Sapir – www.emdat.be, Brussels, Belgium ("EM-DAT The Emergency Events Database"). For a disaster to be entered into the EM-DAT database, at least one of these criteria must be fulfilled: 10 or more people reported killed; 100 or more people reported affected; a state of emergency declared; a call for international assistance. Data shown here refers to disasters with a natural trigger only and does not include technological hazards, wars, conflict or conflict-related famine. See Data notes for further details.

As Figure 7.2 shows, the number of floods (1,522) by far outstrips the number of storms (1,001), other weather-related incidents (634) and all other disaster triggers recorded over the period. Floods are estimated to have affected just under 730 million people – over a third (37%) of the estimated 2 billion people affected by natural hazards between 2008 and 2017. However, floods accounted for a relatively small number of recorded deaths over this period, at 50,312, representing 7% of the total.

Fig. 7.2 Comparing types of disasters between the two last decades



Source: EM-DAT The Emergency Events Database

While affecting far fewer people than some of the other categories (338 million), the 1,001 storms account for a greater proportion of deaths, at 10%. Likewise, storms also represented a large proportion of the estimated disaster damages: 42% of the 1,658 billion US dollars between 2008 and the end of 2017.² Storms in the Americas accounted for just under a third (32%) of total estimated damages over the last ten years, over 47% of which were caused by Hurricanes Harvey, Irma and Maria in 2017. It is worth noting that only half of the 3,751 recorded natural hazards in 2008 to 2017 had associated data on damages: for example, just 0.5% of reported damages during this time relate to disasters in Africa. This underestimates the loss – and ongoing economic impact – in poor countries, where values of physical assets are low and/or may remain private and unreported. This also underestimates the loss or impact of disasters that occur in lower income/low insurance penetration countries.

Though likewise few in number, the largest killer remained earthquakes, causing 351,968 deaths during the decade and some 49% of the total. Earthquakes also represented the next largest share of recorded estimated damages over the period, much of which (20.9%) relates to earthquakes in Asia – mainly the Tōhoku earthquake and tsunami in Japan in 2011.

2. All data is in current prices. See Data notes for further details. Only half of the 3,751 recorded natural hazards in 2008–2017 had associated data on damages. In the 2008–2017 data, 0.5% of reported damages relate to disasters in Africa; 43.9% in the Americas; 45.4% in Asia; 6.6% in Europe; and 3.5% in Oceania. In terms of value, amounts are driven by losses in wealthier countries where both asset values and insurance penetration are higher.

Epidemics killed less people than the categories already noted (bar drought), at 47,676 deaths for the decade, representing 7% of the total, and affected far fewer people overall, at 4,210,414 or less than 1% of the total for the decade.

EM-DAT defines ‘affected persons’ (in relation to the figures already cited) as “people requiring immediate assistance during a period of emergency, i.e., requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance”. Based on this definition, therefore, the ‘people requiring assistance’ – the humanitarian caseload – from natural hazards was overwhelmingly produced by floods, droughts and extreme temperature.

Direct deaths and estimated damage mainly came from storms and earthquakes, making them equally important targets for risk reduction. Likewise, while comparatively modest in terms of current impact, the unique capacity of epidemics to grow to globe-threatening proportions also rendered them urgent candidates for action. The humanitarian caseload in the case of epidemics must be seen to include not only people already affected and needing medical treatment – but also people likely to catch it and facilitate its rapid spread.



St Maarten, 2017

Hurricane Irma damaged or destroyed 70% of homes and buildings on the island of St Maarten and critical infrastructure, including water supplies, was severely damaged.

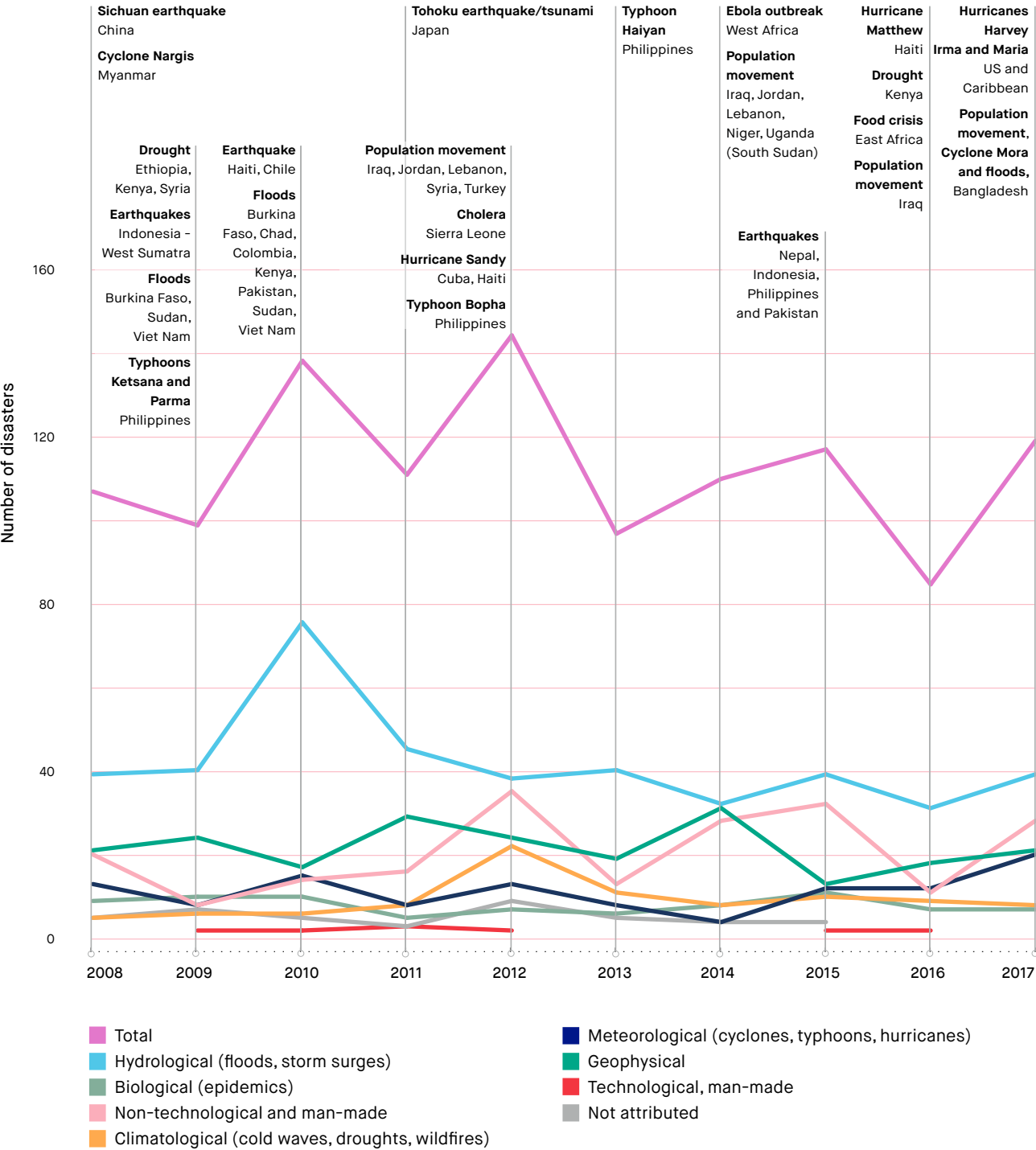
©Arie Kievit, Netherlands Red Cross

Fig. 7.3 Trends in natural hazards, 2008–2017



Notes: There is no data on the number of people affected in 17 of the 198 countries/territories that experienced disasters over the last ten years. Just over 50% of the 3,751 recorded disasters have associated data on estimated damages; there is no data on costs for 57 of the countries affected by disasters. There is no damage data for the 291 recorded epidemics. Extreme temperature, drought, landslides and wildfire are grouped to simplify this graph: 736.6 million people were affected by droughts and 90.5 million people by extreme temperatures over the period. Damages are estimated at 79.3 billion US dollars for droughts and just over 30 million US dollars for extreme temperatures. Estimated damage from drought is infrequently reported: only 30% of the 165 recorded incidents of drought have associated damage data.

Fig. 7.4 IFRC emergency response triggers: trends and timeline 2007–2018



Source: IFRC GO

Fig. 7.5 IFRC emergency response triggers: ten most common disaster triggers (two-decade comparison)

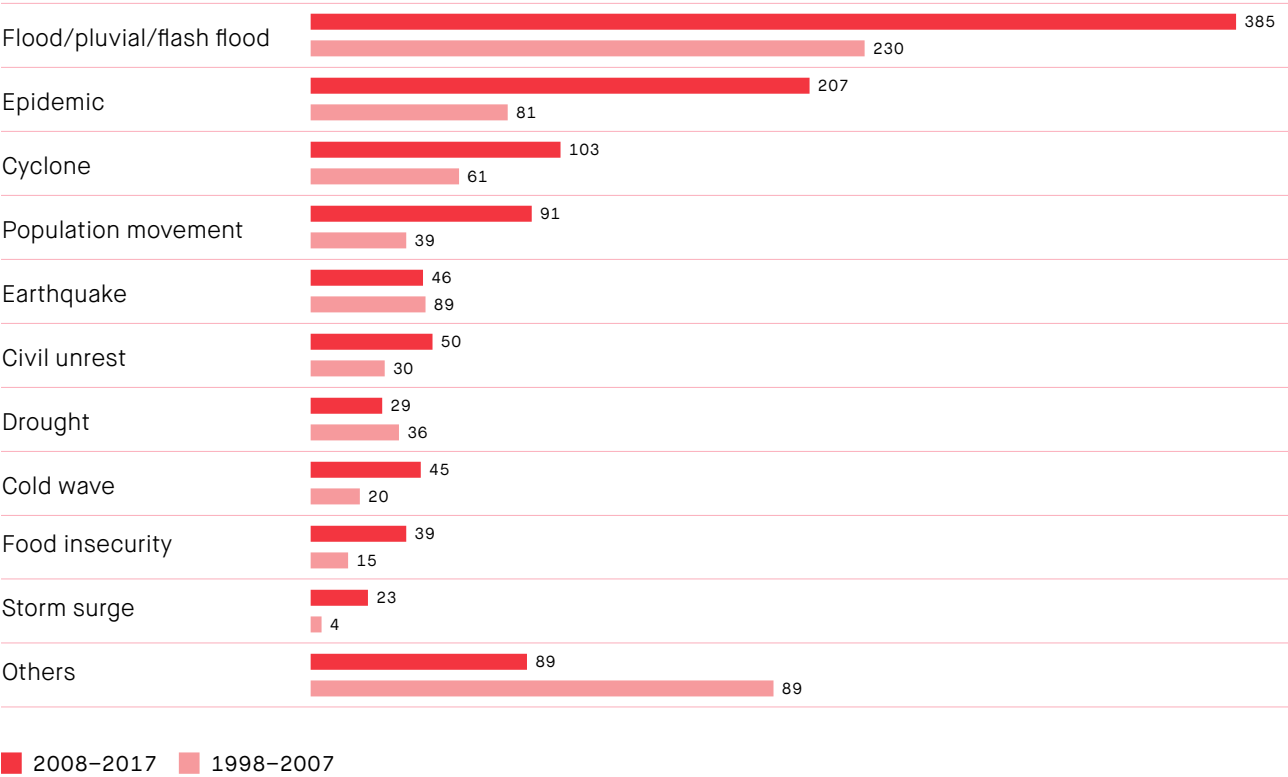


Fig. 7.6 IFRC emergency response triggers, two decade comparison

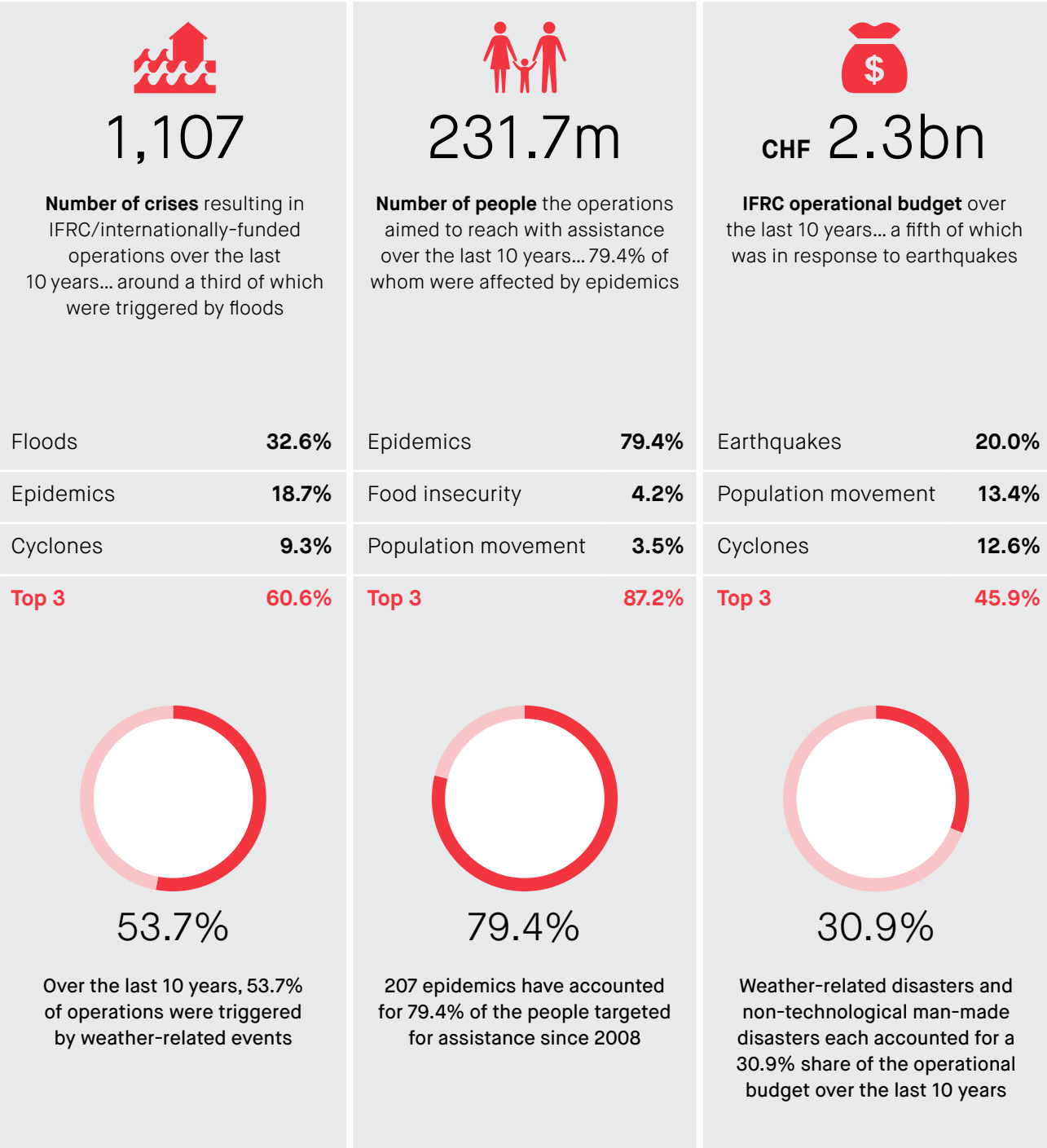
	1998–2007	2008–2017		1998–2007	2008–2017
Weather	46.5%	53.7%	Epidemic	10.7%	18.7%
Hydrological	31.0%	36.9%	Non-technological and man-made	11.3%	17.6%
Flood	30.5%	32.6%	Civil unrest	4.0%	4.5%
Pluvial/flash flood	0.0%	2.2%	Complex emergency	0.1%	1.4%
Storm surge	0.5%	2.1%	Food insecurity	2.0%	3.5%
Climatological	7.4%	7.5%	Population movement	5.2%	8.2%
Cold wave	2.6%	4.1%	Geophysical	8.2%	6.3%
Drought	4.8%	2.6%	Earthquake	6.2%	4.2%
Wild fire	0.0%	0.8%	Landslide	0.4%	0.9%
Meteorological	8.1%	9.3%	Tsunami	0.3%	0.0%
Cyclone	8.1%	9.3%	Volcano	1.3%	1.3%

Notes: There are 755 events recorded in data on Disaster Emergency Response Funds (DREFs), emergency appeals and movement-wide appeals for the period 1998–2007; and 1,107 for 2008–2017. Figure 7.5 shows data for the ten most frequent triggers; flood, pluvial and flash floods (24 in the period 2008–2017) have been combined for the purposes of this chart. 'Others' (not in the chart) includes: chemical emergencies, fires, transport accidents and wild fires.

Source: IFRC GO

IFRC operations

Fig. 7.7 Overview of IFRC operations, 2008-2017



Source: IFRC GO

Comparing IFRC operations³ by disaster type provides an additional perspective on trends. The comparison reveals weather-related events (a combination of hydrological, climatological and meteorological disasters) have accounted for 594 (53.7%) of the 1,107 emergency response triggers over the last ten years – up slightly from the 351 (46.5% share) from 1998 to 2007. Consistent with their huge impact globally, floods were by far the largest single trigger for an IFRC response – accounting for 32.6% of all triggers since 2008 (see Figure 7.7).^{4,5}

Much of the IFRC’s disaster risk reduction (DRR) work has likewise focused on hydro-meteorological disasters, notably in relation to floods and storms. One example is the long-standing partnership with the Z Zurich Foundation to build flood resilience, with phase one projects (2013–2017) in the Americas and Asia. Based on the Foundation’s phase one learnings, over the next five years, the Flood Alliance – consisting of nine organizations representing the private, research and humanitarian sectors – will focus on leveraging practical field-level experiences and research capabilities to influence a global change in approach to community flood resilience. The vision is that, despite increasing frequency and severity of floods and the impacts of climate change, communities and businesses can flourish.

As Figure 7.7 shows, the second-largest category of IFRC operations (207 or 18.7%) was responses to epidemics. These operations also targeted the largest numbers of people (indispensable to stopping an epidemic in its tracks), representing over 79% of people targeted in the decade. This was exemplified in the recent West Africa Ebola crisis, where more than 6,000 volunteers engaged in frontline activities in the most seriously affected countries, while thousands more across the region worked on education, prevention and monitoring activities.

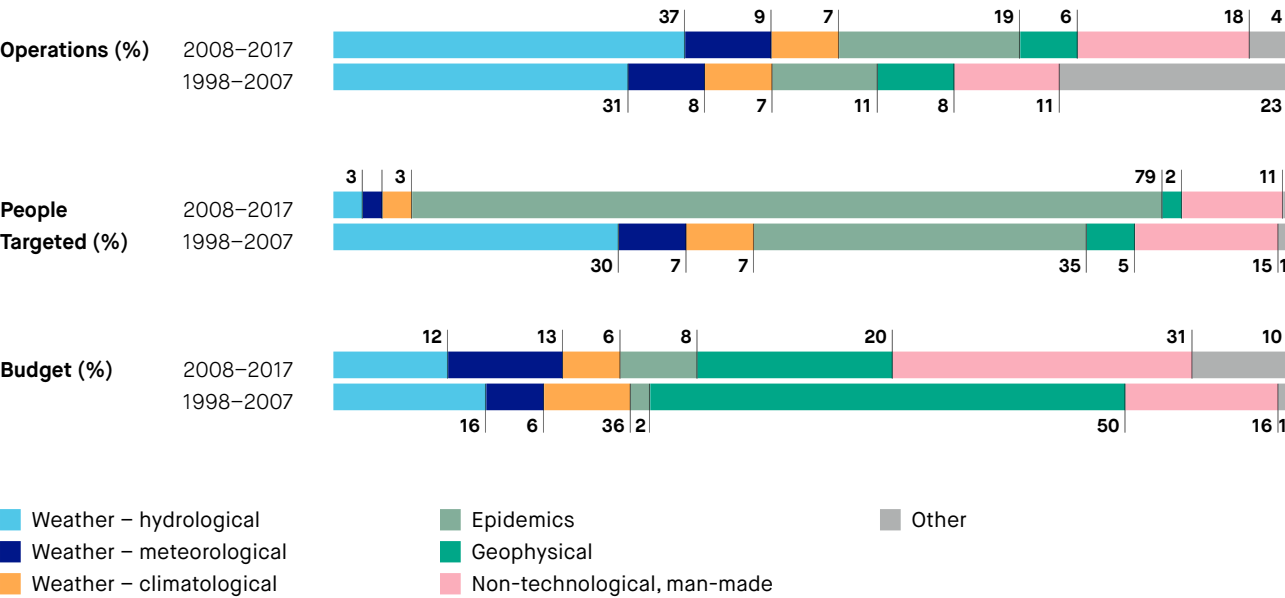
Responses to population movements have also been increasing in number and intensity (IFRC, 2018g) around the world, and most visibly in recent years along the route to Europe. This has strongly mobilized IFRC members, leading to a new network-wide strategy on migration adopted in 2017 that aims to scale up programming, advocacy and cooperation around support for these vulnerable people. Likewise, in 2018, the IFRC secretariat commenced a system-wide review of services to internally displaced persons.

3. This represents operations in which the IFRC provided funding or more direct engagement – it does not incorporate all domestic operations by National Societies in their own countries.

4. In IFRC data, ‘hydrological’ comprises storm surges, floods and pluvial/flash floods; ‘meteorological’ cyclones and tornadoes; and ‘climatological’ cold waves, heat waves, drought and wildfires.

5. IFRC GO provides data on disasters that have triggered a DREF, emergency appeal or movement-wide appeal.

Fig. 7.8 Share of IFRC operations by disaster category, number of people targeted and budget, 1998–2007 and 2008–2017



Notes: Hydrological includes floods, pluvial/flash floods and storm surges. Meteorological includes cyclones. Climatological includes cold waves, droughts and wild fires. Geophysical includes earthquakes, landslide, tsunamis and volcanoes. Non-technological and man-made include civil unrest, complex emergency, food insecurity and population movement. See Tables A.1–A.3 in Data notes for full breakdown.

Source: IFRC GO

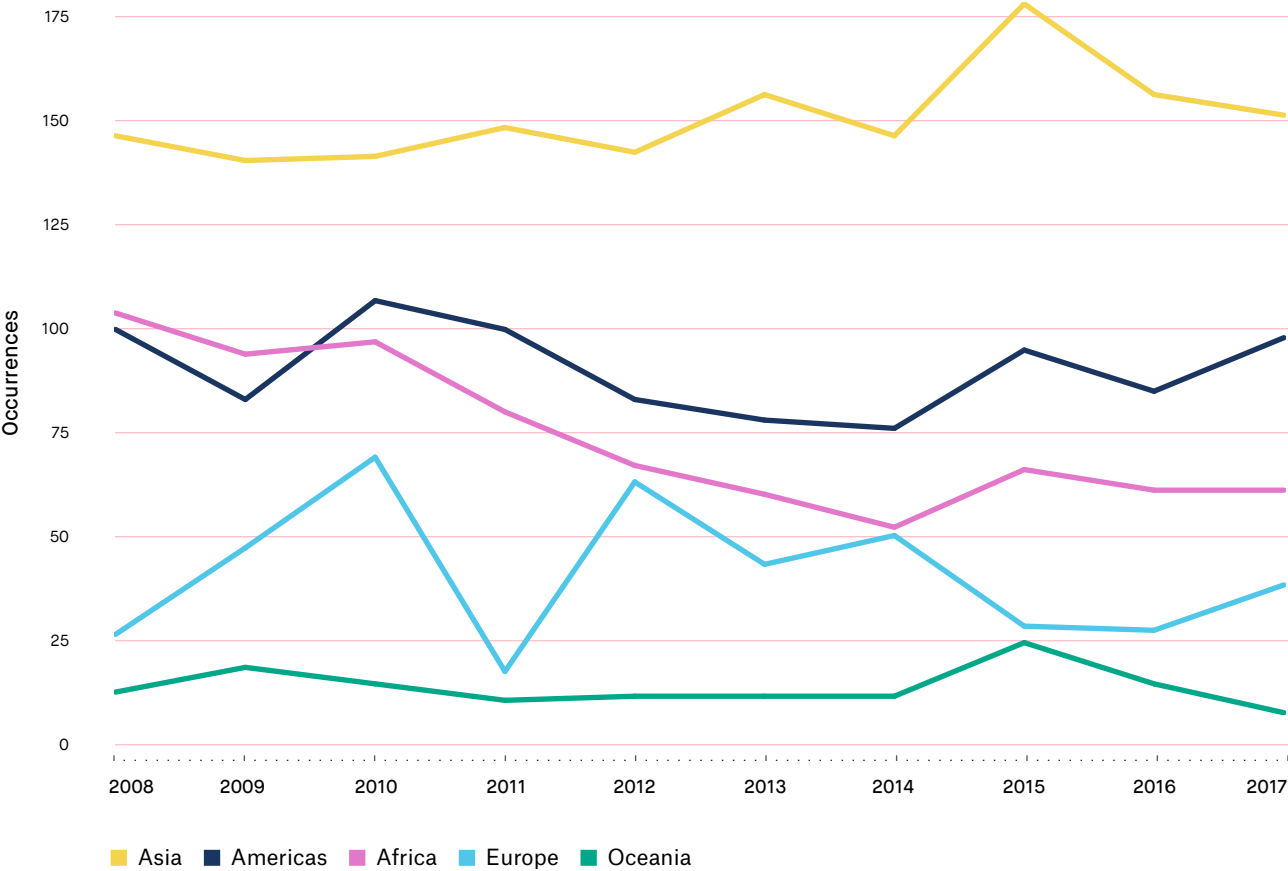
7.1.2 Where are disasters hitting?

The largest proportion (40.6%) of the 3,751 disasters recorded by EM-DAT over the last ten years have taken place in Asia – the world’s most densely populated region and one that has experienced 69.5% of the last decade’s earthquakes, 69% of landslides, 43.7% of storms and 41.1% of floods. Asia also has by far the largest share of affected people (79.8% of the total over the period) and the largest share of estimated damages (45.4%).

While the data shows fewer disasters and people affected over the 2008 to 2017 period than the previous decade (9% less incidents and 29% less people affected), estimated damages more than doubled in the region from 326.6 billion to 752.2 billion US dollars. This is chiefly attributable to the 2011 Tōhoku earthquake and tsunami in Japan (where damages were costed at 210 billion US dollars). Damages caused by floods are also estimated to have more than doubled (from 117 billion to 235 billion US dollars, while damage caused by storms and drought also increased (see Figure 7.10).⁶

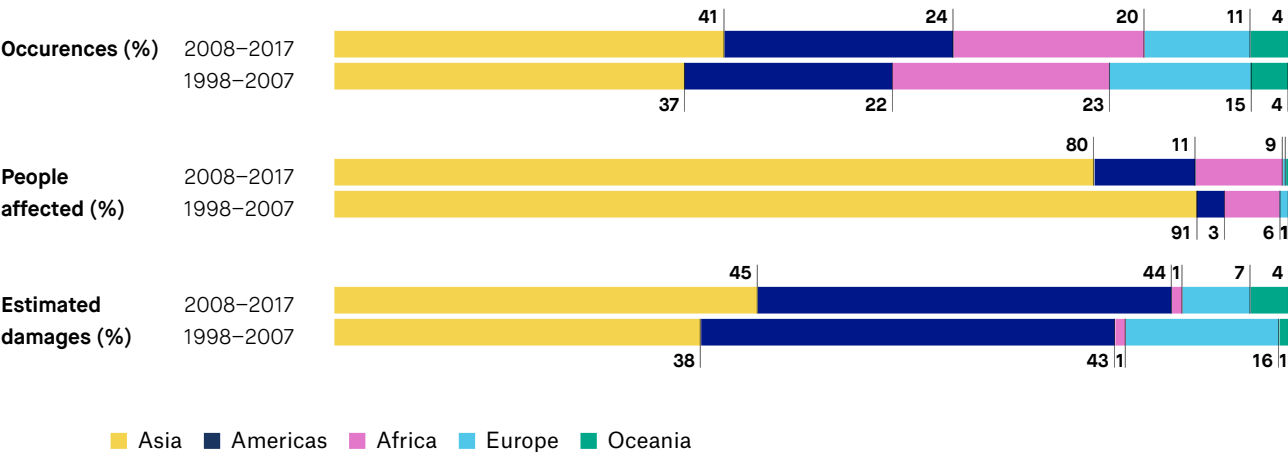
6. Unless otherwise stated, all regional classifications in this section are based on standard UN classifications, except for IFRC operations which use IFRC regional classifications. For further details see Data notes.

Fig. 7.9 Which regions are most affected by disasters?



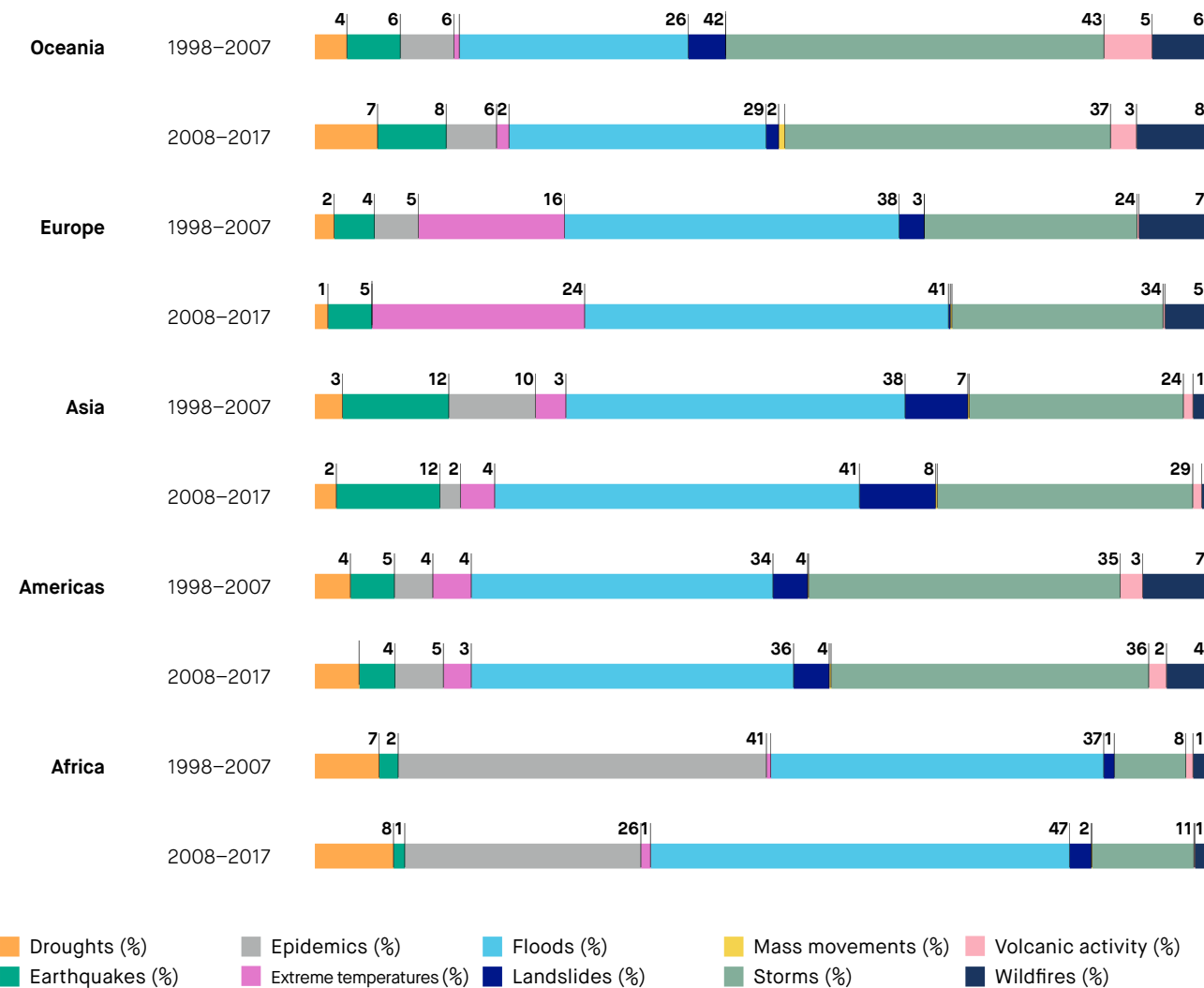
Source: EM-DAT The Emergency Events Database

Fig. 7.10 Comparing regions affected by disasters over the last two decades



Source: EM-DAT The Emergency Events Database

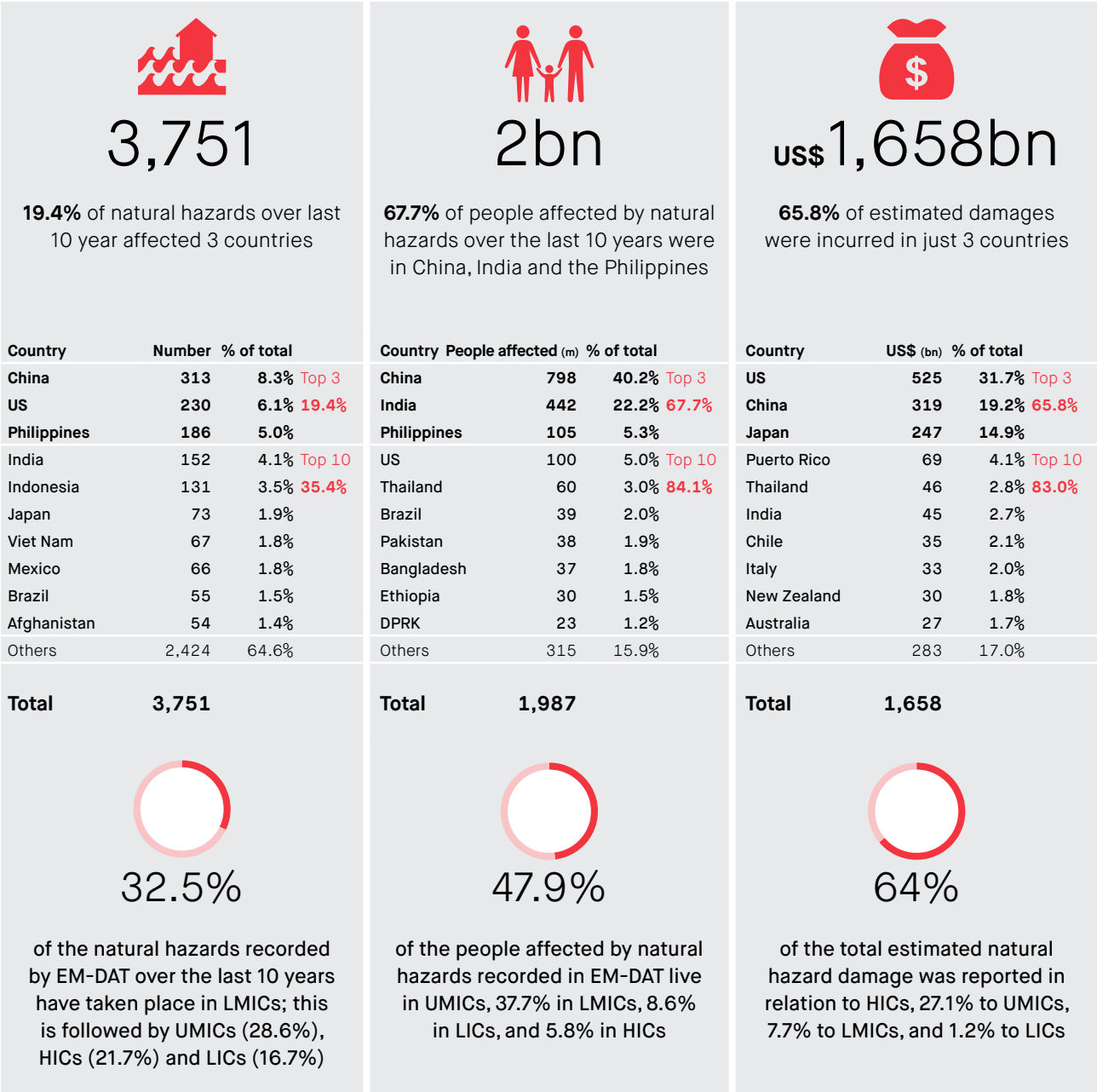
Fig. 7.11 What types of disasters impact each region as a percentage of total disasters?



Source: EM-DAT The Emergency Events Database

EM-DAT data shows China, the US, the Philippines, India and Indonesia to be the five countries most frequently hit by natural hazards over the last ten years. China and India alone account for 62.4% (1.2 billion) of the 2 billion people estimated to have been affected by disasters since 2008. Seven of the worst-affected countries, in numbers of people affected, are in Asia.

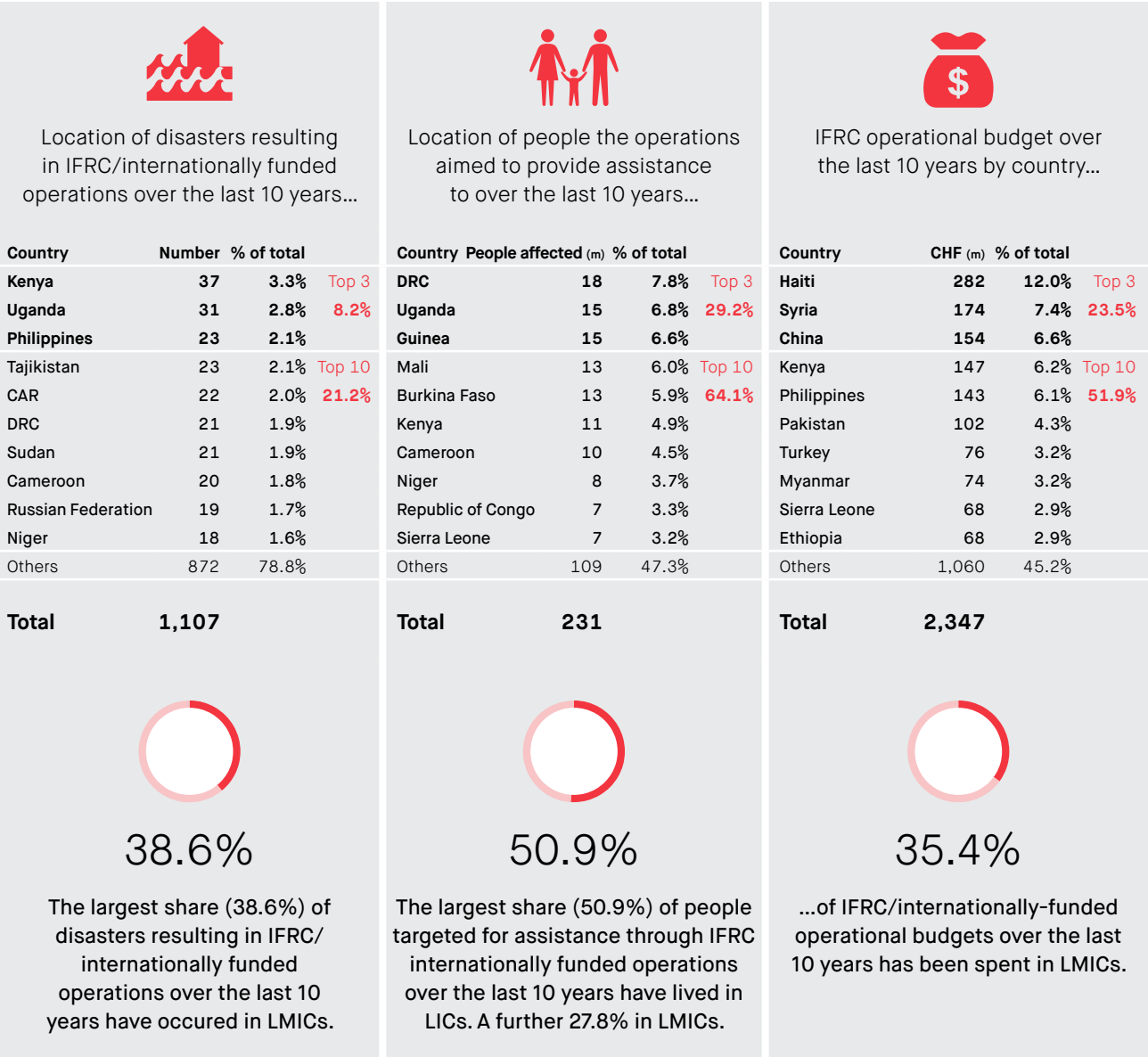
Fig. 7.12 Which countries are affected by disasters?



Notes: The four World Bank country classifications by income level are: high (HIC), upper-middle (UMIC), lower-middle (LMIC) and low (LIC). The classifications used in this analysis were released on 1 July 2017 and relate to the World Bank fiscal year ending in 2018. DPRK: Democratic People's Republic of Korea. Hazards are based on data for 198 countries/territories. No data of numbers affected for 17 countries. No data of estimated damages for 57 countries. Estimated damages does not include epidemics.

Source: EM-DAT

Fig. 7.13 IFRC operations in countries affected by disasters



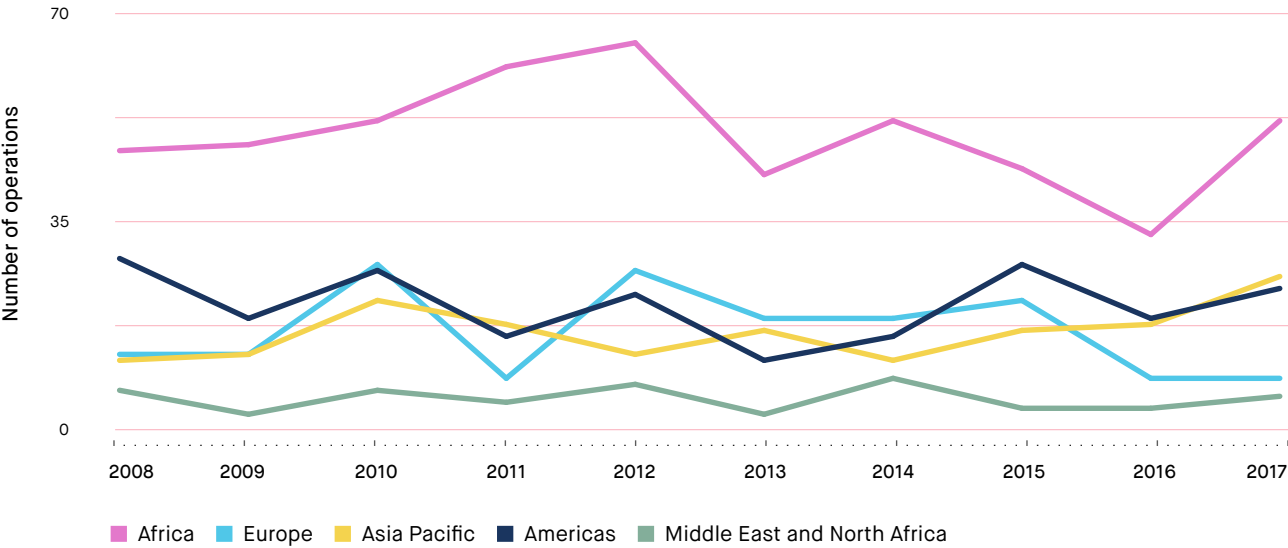
Notes: There has been a big increase in the number of responses to disasters in LICs this decade, especially in East Africa, and a rise in the number of operations taking place in LICs, mainly arising from population movements. The number of people who operations aimed to assist in LICs is 10 times higher this decade than in 1998–2007. The change is accounted for by population movements, epidemics, food insecurity and drought. The operational budget to assist people in LICs has increased more than four times in the last ten years. The total number of people targeted represents the number of people included in each operational plan – there may be some overlap/double-counting where people are targeted by more than one operation.

Source: IFRC GO

China and the Philippines are also prominent in IFRC data on internationally funded and emergency operations. In 2017 alone, there were seven ongoing operations in the Philippines – including four typhoons (two of which were in December), a tropical storm, an earthquake and population movement. China has only been the subject of three such operations over the last ten years but is the third-largest recipient in volume of funding – almost all of this (99%) in response to the Sichuan earthquake in 2008. Haiti and Syria received the most funding: in Haiti’s case, 86% relates to the earthquake in 2010 – but it has also experienced devastating storm damage, including Hurricanes Irma (2017), Matthew (2016) and Sandy (2012).

Looking at numbers of IFRC operations and the number of people targeted, the largest focus is on sub-Saharan Africa. Over the last decade, 474 IFRC operations, or 42.8% of the total, were targeted to this region. Operations coordinated by the Africa regional office targeted 34 million people during the Ebola virus outbreak in 2014 and 2 million people as part of food insecurity operations in 2017. And in Uganda, 17 of 31 operations aimed to assist nearly 15 million people affected by epidemics (cholera, yellow fever, hepatitis E, Marburg, measles, meningitis and polio).

Fig. 7.14 IFRC operations by region 2008–2017

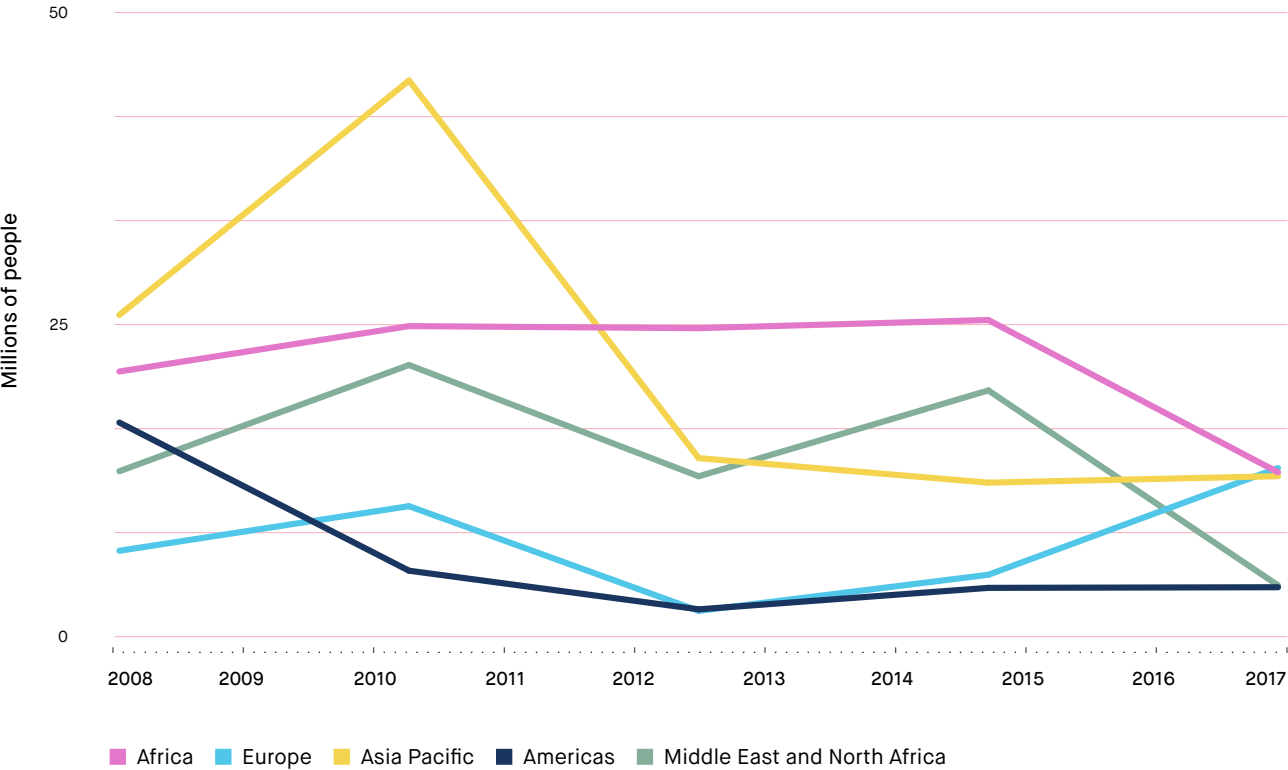


Source: IFRC GO

National Red Cross and Red Crescent Societies reach

Unfortunately, existing data on the reach and programming of National Societies (in their own countries and abroad) is not yet as detailed and comprehensive as that on the scope of international operations led by the IFRC. However, the Federation-Wide Databank and Reporting System (FDRS) now has five years of data on the reach of certain activities at country level. From 2012 to 2016, National Societies reached over 368 million people with disaster response and early recovery services in their own countries. As Figure 7.15 shows, Asia-Pacific and Africa generally accounted for the largest share of this total.

Fig. 7.15 People reached by National Society disaster response and early recovery 2008–2017



Source: IFRC FDRS (National Society reporting was not complete, however; in both 2012 and 2016 less than 80% of National Societies reported – whereas over 90% reported in the intervening years – and reporting from the Middle East and North Africa region was below 70% in 2016.)

7.1.3 Countries and people most at risk today⁷

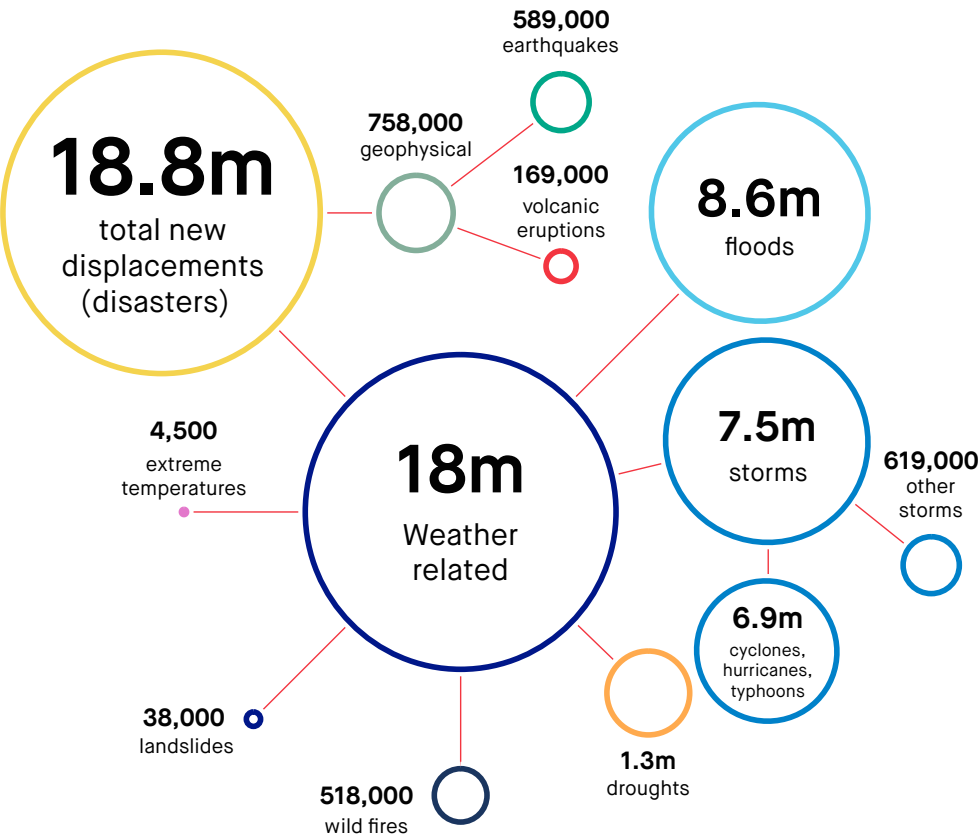
Countries experiencing humanitarian crises and people in need of assistance

According to the *Global Humanitarian Assistance Report 2018*, ongoing and new crises left an estimated 201.5 million people in 134 countries in need of international humanitarian assistance in 2017 (Development Initiatives, 2018). Over a third of the people in need were in just five countries – Yemen, Syria, Turkey, Ethiopia and Iraq. Most countries needing international assistance were affected by multiple crisis types – with many conflict-affected countries also hosting refugees and experiencing disasters associated with natural hazards. The number of people forced into displacement by conflict or violence reached an estimated 68.5 million by the end of 2017, the highest recorded total to date. According to the *Global Report on Internal Displacement 2018* (IDMC, 2018), 61% (18.8 million) of the 30.6 million newly internal displaced persons in 2017 were triggered by disasters (IDMC/NRC, 2018). Weather-related

7. 2017 is the latest year for which there is full and final data.

hazards triggered the vast majority, with floods accounting for 8.6 million and storms 7.5 million (see Figure 7.16). China, Philippines, Cuba and the US were the worst affected.

Fig. 7.16 Breakdown of displacement by disaster, 2017



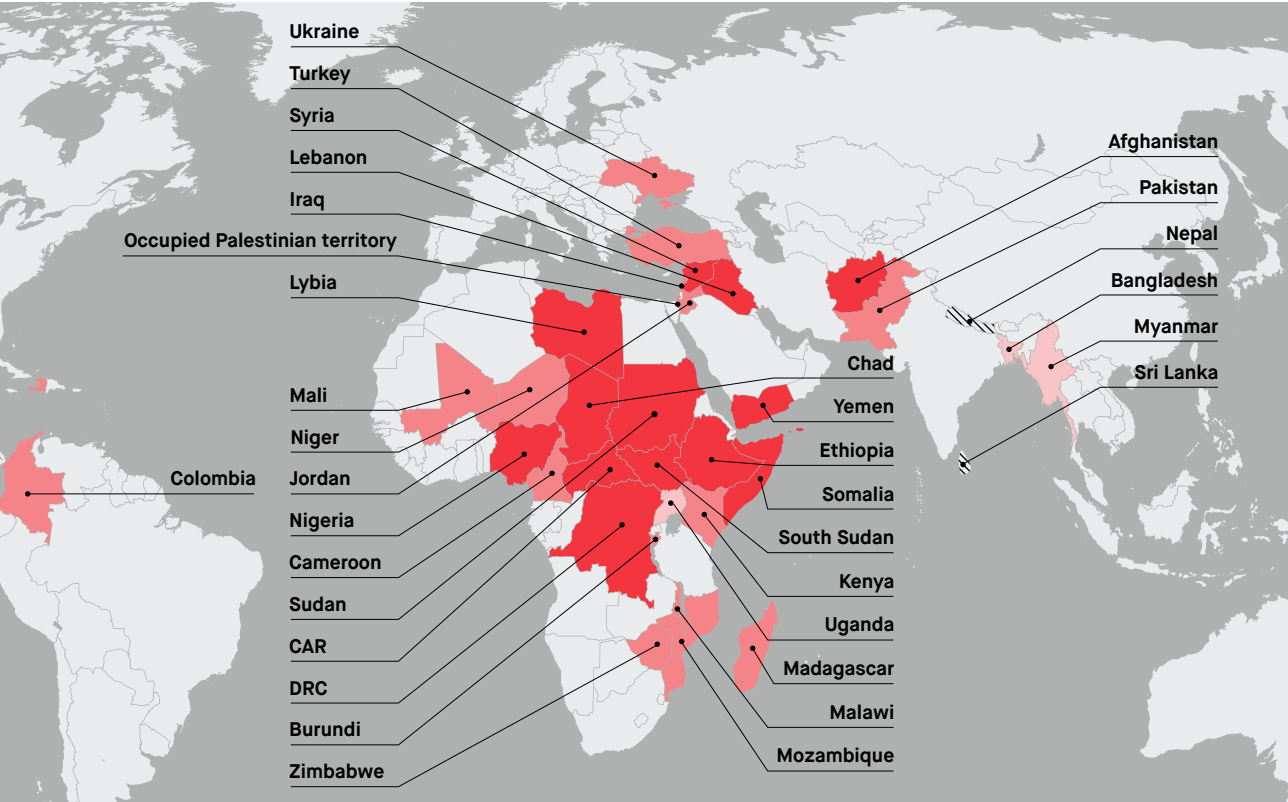
Source: IDMC: *Global Report on Internal Displacement 2018*

The map in Figure 7.17 represents 190.9 million of the 201.5 million (95%) people estimated by the *Global Humanitarian Assistance Report 2018* to be living through humanitarian crises in 2017, in the 36 countries with the highest rates of need (Development Initiatives, 2018).^{8,9} Of the 36 countries shown, 28 are fragile states, 12 environmentally vulnerable¹⁰ and 25 have been the subject on average of seven or more IFRC appeals, DREFs or movement-wide appeals over the last decade.¹¹

8. Development Initiatives, based on data provided by ACAPS (2017).
9. Development Initiatives based on ACAPS weekly Global Emergency Overview data.
10. Using OECD *States of Fragility 2016* and indicator of environmental vulnerability developed for this report (see Data notes for the list of countries and further details).
11. Four countries (Central African Republic, DRC, Sudan and Cameroon) have been the subject of 20–30 IFRC appeals, DREFs or movement-wide appeals over the last decade, and two countries (Kenya and Uganda) more than 30.

Analysis conducted by ACAPS as part of its Humanitarian Overview 2018 identified 12 countries likely to face deteriorating humanitarian situations in 2018 – Afghanistan, Bangladesh, Central African Republic, Democratic Republic of the Congo (DRC), Libya, Mali, Myanmar, Republic of Congo (CAR), Somalia, South Sudan, Yemen and Venezuela (ACAPS, 2017). Data provided to Development Initiatives by ACAPS shows an estimated 61.3 million people were in need of humanitarian assistance in these countries. A further 55.3 million people in need of humanitarian assistance were living in countries where crises were estimated as likely to remain severe – Ethiopia, Iraq, Nigeria, occupied Palestinian territory, Sudan, and Syria (ACAPS, 2017).

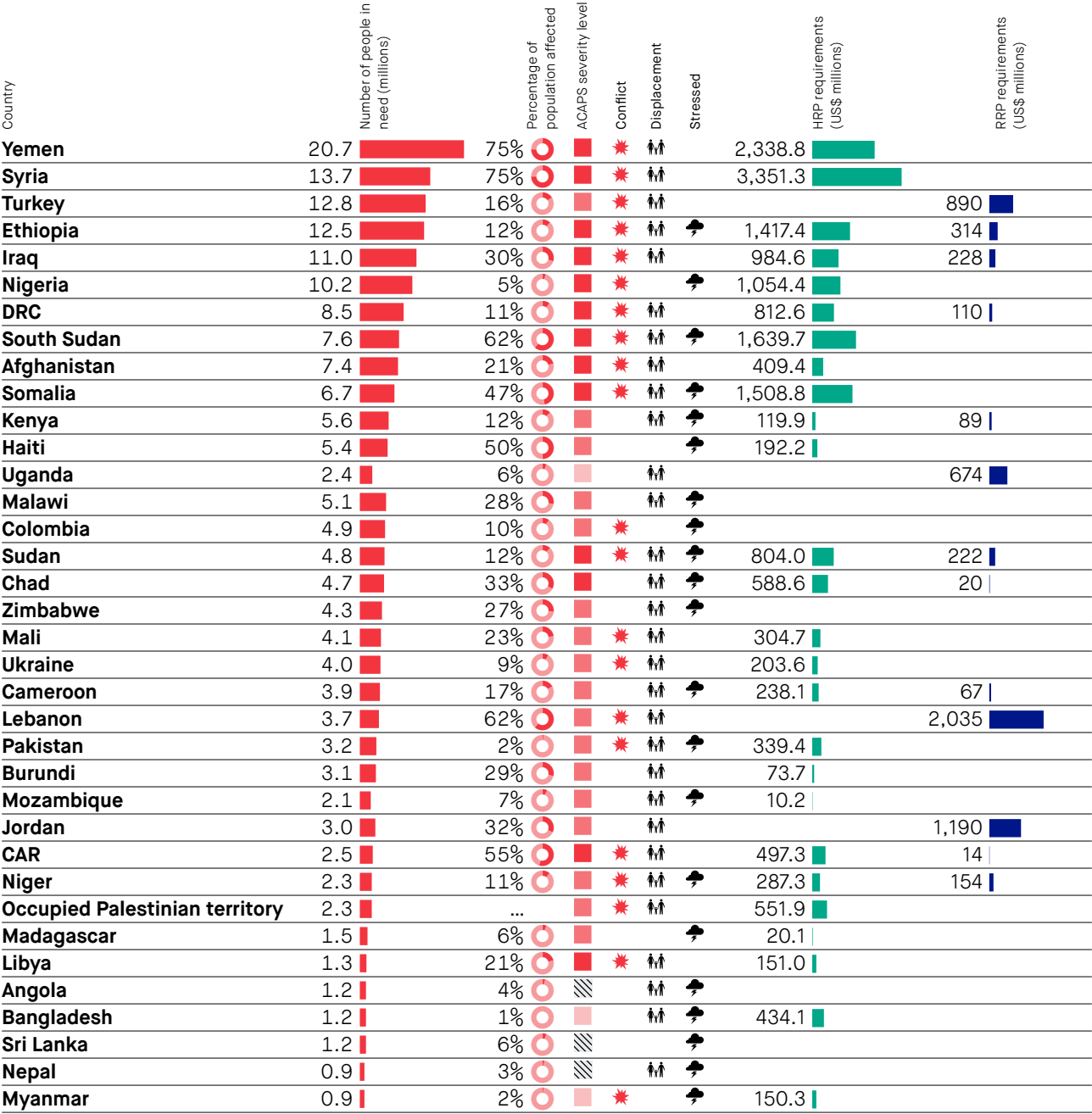
Fig. 7.17 Snapshot of humanitarian crises, 2017



ACAPS severity level: ■ Severe humanitarian crisis ■ Humanitarian crisis ■ Situation of concern ▨ No severity score

Notes: Countries were selected using ACAPS data on severity and corresponding estimates of people in need. Countries with fewer than 0.8 million people in need are not shown. For the purposes of this analysis, a country is classified as having 'experienced disasters associated with natural hazards' when the number of people affected is above the EM-DAT country median, or if the country is included in the FAO El Niño high-risk country list and/or Sahel UN-coordinated regional appeal (Development Initiatives, 2018).

Fig. 7.18 Snapshot of humanitarian crises, 2017



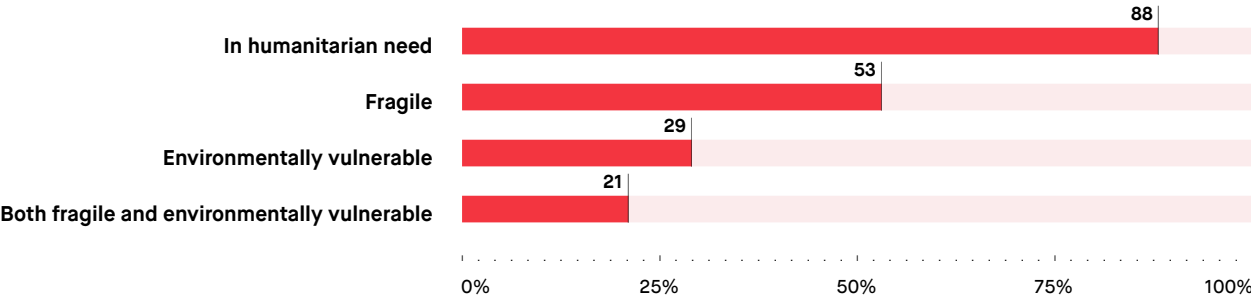
ACAPS severity level: ■ Severe humanitarian crisis ■ Humanitarian crisis ■ Situation of concern ▨ No severity score

Source: Based on *Global Humanitarian Assistance Report 2018* (Development Initiatives) and World Bank population data. Population data (% of population) is from the World Bank.

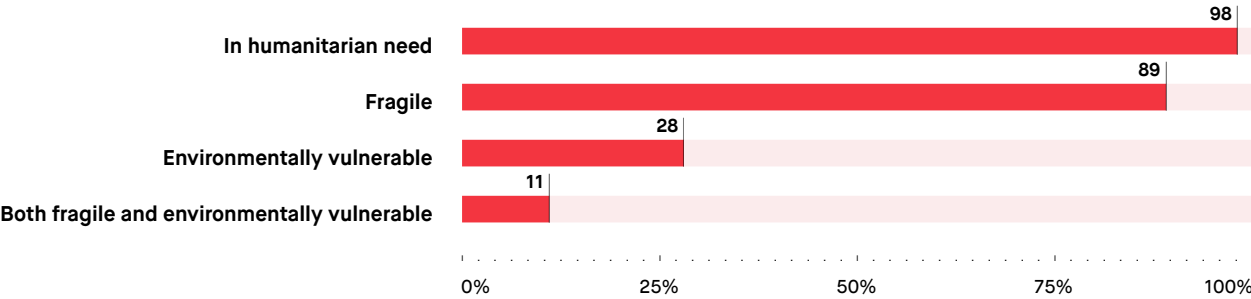
Environmental vulnerability and fragility

Fig. 7.19 IFRC operations in fragile and environmentally vulnerable countries and countries with people in humanitarian need by type of disaster, 2017

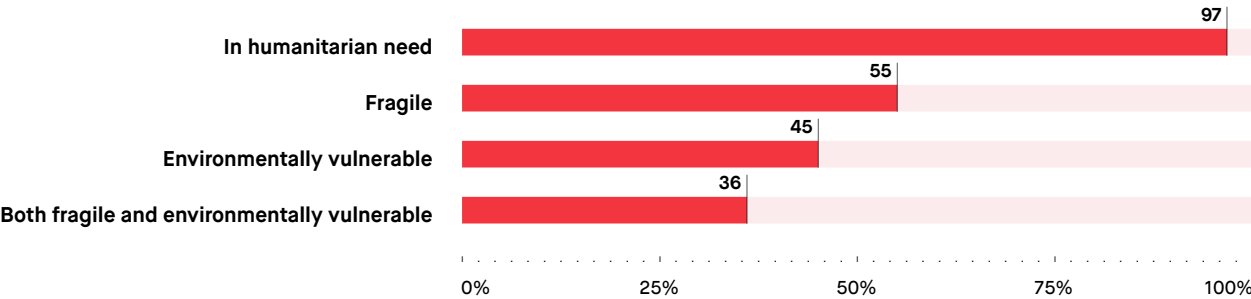
Share of the 179 IFRC ongoing emergencies in 2017 in countries that are considered...



Share of the 79.1 million people targeted for assistance living in countries that are considered...



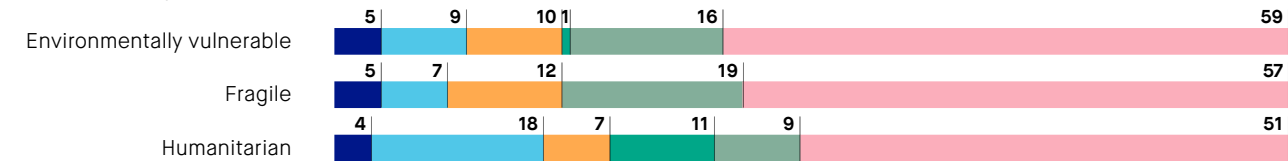
Share of the CHF 806.7 million ongoing operational budgets in countries that are considered...



Note: The figures represent data for all IFRC operations with activity during 2017.

Fig. 7.20 What type of disasters did IFRC budgets provide support responses to in 2017?

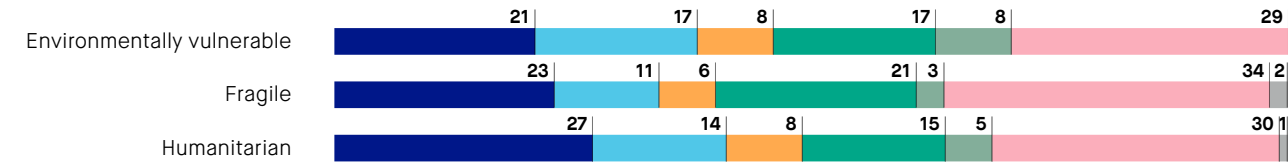
Operational budget (%)



People targeted (%)



Number of operations (%)



- Weather – hydrological
- Weather – meteorological
- Weather – climatological
- Epidemics
- Geophysical
- Non-technological, man-made
- Other

Notes: The fragility categories are based on the OECD's States of Fragility 2016. The indicator of environmental vulnerability is derived from the INFORM Index 2018 indicators on a country's lack of coping capacity and exposure to natural hazards. This results in a list of 27 countries (see Data notes for further details). 3. The analysis of environmentally vulnerable and fragile countries focuses on the 90 countries with their own emergency appeals or DREFs and also includes the Africa regional office food crisis and Ebola operations (ongoing from 2014) as all countries covered were considered fragile based on the OECD list for 2016.

Source: Development Initiatives, IFRC GO, OECD States of Fragility 2016 and INFORM Index 2018

During 2017 there were 179 internationally funded new and ongoing IFRC emergency response operations in place, aiming to provide 79.1 million people with assistance across 93 countries.¹² Over 46% (43) of the 93 countries covered by the 179 operations had been the subject of more than the average number of appeals/emergency operations during the

12. Operations were coordinated from 98 operational centres during 2017. Of the 90 countries that had their own appeals, 30 received additional support through operations coordinated by IFRC Africa, Americas and Europe regional offices, Caribbean country cluster and Suva country cluster. The Americas and Europe regional offices covered operations in another three countries (Croatia, Bolivia and Paraguay) that did not have their own appeals. The number of people targeted for assistance is the sum total of each operation's planned targets. Overall figures include a large number of people indirectly targeted through the West Africa Ebola response operations and country-wide immunization campaigns. There may be some double-counting where plans target the same people, but efforts are being made to include how the IFRC counts people: see IFRC (2018h).

preceding decade and more than half of them (55.6%) were considered fragile (45 countries), environmentally vulnerable (23) or both (20 countries).¹³

Floods and cyclones had prompted 40% of IFRC operations, epidemics and population movements a further 30%. As already noted, the vast majority of people targeted for assistance (79%) had been affected by epidemics – by far the largest number of whom were in Africa. Population movements, however, accounted for the largest share (24%) of the operational budgets, followed by complex emergencies (22%); together with food insecurity and civil unrest, these non-technological, man-made disasters accounted for 50% of the combined ongoing operational budgets.

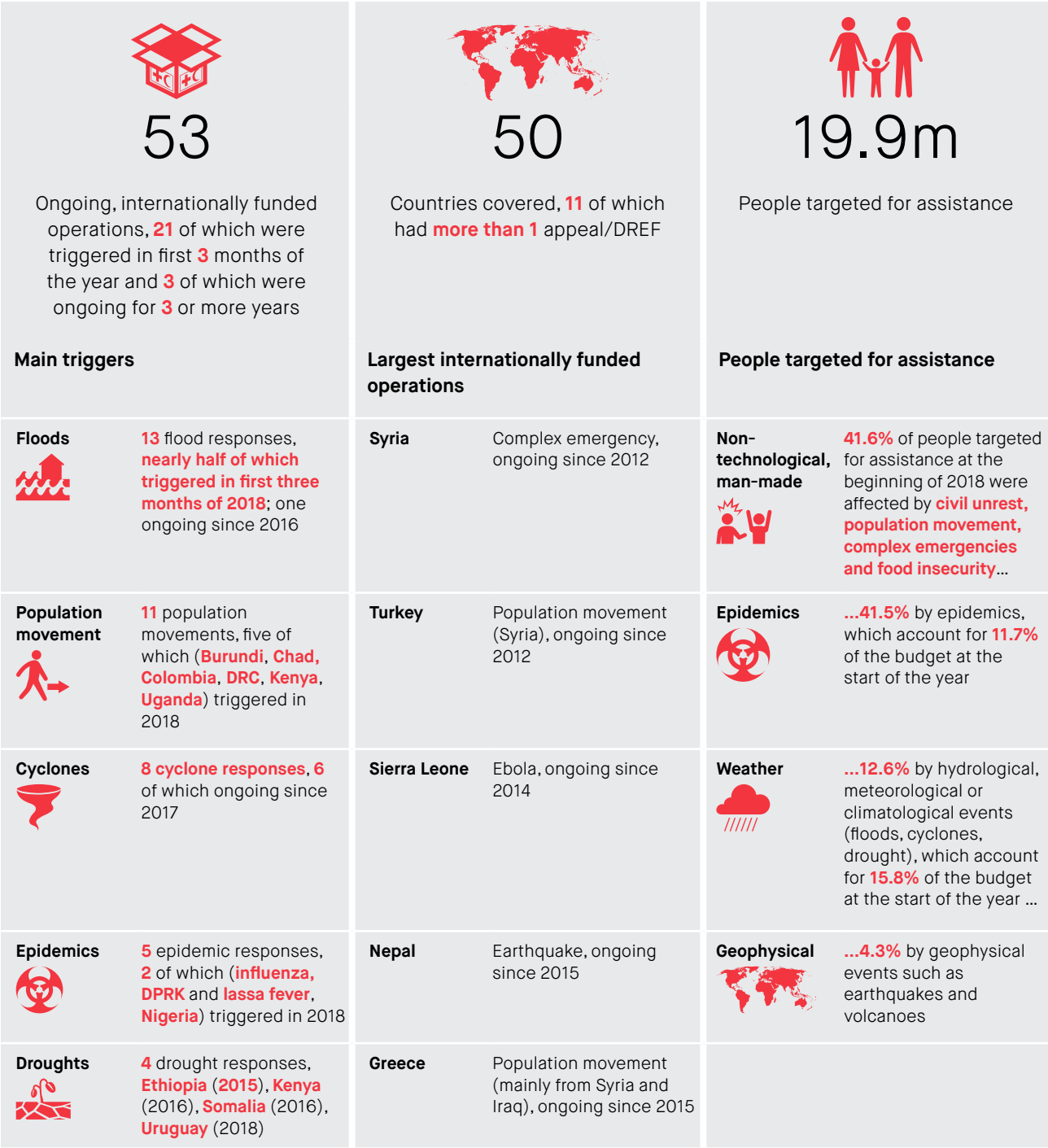
As already outlined, 117 of the year’s 179 operations – comprising 19 emergency appeals, 94 DREFs and four movement-wide appeals – were triggered during 2017. Over 25% of them, and 70% of the 11.2 million CHF budget (11.3 million US dollars¹⁴), focused on supporting people in just ten countries. Almost a third (just under 36 million CHF/36.3 million US dollars) of the year’s combined emergency budgets was to support operations in Bangladesh: the displaced and host communities in the Cox’s Bazar District, following large-scale population movement, Cyclone Mora and landslides (affecting some of the same people in Cox’s Bazar), and floods.

Looking to the latest data – by the end of the first quarter of 2018, EM-DAT had already recorded 65 disasters with natural triggers, affecting 1.4 million people and incurring an estimated 5 billion US dollars in damages. The IFRC was already attempting to assist 19.9 million people affected by 53 ongoing disasters, 21 of which triggered in the first three months of the year.

13. The INFORM Index for Risk Management scores countries in multiple areas on their risk of disaster and conflict. This report uses a combination of INFORM’s indicators on a country’s lack of coping capacity and exposure to natural hazards. Countries considered environmentally vulnerable fulfil both of these criteria: 1) a lack of coping capacity score that is medium, high or very high; and 2) a natural hazard score that is high or very high. For the 2018 index, this translates into a country scoring at least 4.7 in both criteria, which results in a list of 27 countries (INFORM, 2017). See Data notes for the full list of countries and further details.

14. Currency conversion here and just below as of 9 August 2018 using [xe.com](#).

Fig. 7.21 Snapshot of ongoing IFRC operations, end of March 2018



Note: The number of people targeted for assistance is the sum of people targeted when adding totals from each operation.

Source: IFRC GO

7.1.4 Conclusions

During the last few decades, floods and storms have been the primary type of disaster caused by natural hazards around the world – though even more people were affected by droughts and extreme temperatures. Geographically, Asia has seen the most disasters and the most people affected.

To a certain extent, these numbers are echoed by the IFRC’s international appeals and deployments, where more than half were in response to weather-related events and floods were the most frequent trigger. However, the IFRC has also placed special emphasis on Africa and on responses to epidemic outbreaks – reaching the greatest numbers of people there with activities to monitor and control their spread, as well as directly supporting people impacted by the disease. Perhaps unsurprisingly, the IFRC appeals do track closely with countries considered to be politically or environmentally fragile.

Some of these appeals relate to natural hazards happening in a complex environment. However, the IFRC is also quite active and sought-after for support to National Societies in response to man-made disasters, particularly population movements, but also complex emergencies and civil unrest. These types of crises made up more than half of the IFRC operational budgets in 2017 and represent nearly half of the people targeted, at the time of writing, in 2018. Africa and the Middle East led the world with countries experiencing multiple types of crises at once, with a high concentration of need in just a few countries.

7.2 Data gaps and trends

While the data provides important insights about disasters and disaster response – it is also critical to understand its limits. Data itself has become a primary preoccupation in the field of disaster management and the humanitarian sector more broadly. Thus, the trends about how data is gathered and used have become central aspects of the humanitarian landscape.

7.2.1 What is missing?

The data presented in the previous sections provides some top-line figures on disasters and the people affected by them, based mainly on EM-DAT data (a curated and verified compilation of data drawn from UN, government and other sources) and IFRC GO data (which contains details of DREFs, emergency and movement-wide appeals) and the FDRS (which relies on self-reporting by National Societies and is only recently gathering comprehensive data). Such broad-brush analysis of course has its limits, as people involved in the collection, curation and use of underlying data, as well as its selection and presentation, are often acutely aware. The limitations, caveats and annotations to the data can be highly revealing about the people left behind.

The omissions include but are not limited to:

- crises that fall outside of definitions, parameters and indicators (“for a disaster to be entered into the EM-DAT database, at least one of the following criteria must be fulfilled: ten (10) or more people reported killed; hundred (100) or more people reported affected; declaration of a state of emergency; call for international assistance” (see Data notes);
- people who miss being included in indicators either through lack of data or methodological cut-off points – for example, the classification of environmentally vulnerable countries used in Figure 7.18 narrowly excludes countries such as the Philippines; and INFORM does not as yet include epidemics in natural hazard indicators (Marin-Ferrer et al, 2017);¹⁵
- the people whose lives and livelihoods may have been devastated by epidemics and other disasters who may not have been counted or accounted for in quantifications of ‘damage’ (see Data notes); and
- the people who do not figure in underlying national statistics, who are not captured due to limitations in local data collection capacities, or who are not investigated due to mistaken assumptions, for instance very poor people in middle-income countries.

7.2.2 Challenges to compiling and making better use of data

The last few years have seen increasing attention to data and ‘data gap’ issues, many of which are now on the radar and agenda of humanitarian and development organizations, global processes and agreements. This is often in the context of decision-making, project programming, innovative programming, financing, monitoring, evaluation and evidence. The challenges include:

- a mixture of poor, patchy or missing administrative, census and household data at some national and local levels;
- fragmented and incomparable data sets within and between government ministries, agencies and non-governmental organizations (NGOs); and
- a seemingly paradoxical abundance of (sometimes ‘big’) data that responders lack capacity to access, process, compare, analyse and/or use.

The UN Secretary-General’s 2017 report on international cooperation on humanitarian assistance in disasters caused by natural hazards, for example, highlights the need for better data on their impacts– particularly damage and losses. (UNGA, 2017). On this issue, following several years of work by the UN Office for Disaster Risk Reduction (UNISDR), partners and more than 90 governments to establish national disaster loss databases, March 2018

15. WHO and the Joint Research Council are working to include an infectious disease outbreaks component in INFORM’s natural hazard category. This will complement natural hazard risk inputs on earthquakes, tsunami, flood, storm surge and tropical cyclones. For more details see Data notes or [INFORM](#).

saw the beginning of efforts by UN member states to systematically collect data on everyday losses experienced as a result of natural or man-made hazards, as well as related environmental, technological and biological hazards and risks, and the launch of the Sendai Framework Monitor tool (Mizutori, 2018). However, this is at a very early stage.

The UN Secretary-General's report highlights the work of other initiatives using data and technology to enhance the understanding of and response to disaster risks and impacts, including INFORM, Centre for Humanitarian Data and Missing Maps (UNGA, 2017a). Alongside work to improve the systematic collection, standardization and use of data, various tools, technologies and approaches – including digital analysis, earth observation, remote sensing, machine learning and crowd sourcing – can all now be harnessed to build a richer picture as disaster risk increases in speed and intensity.

Box 7.2 Use of data and technology by humanitarians

Sharing and connecting data: the case of Cyclone Enawo

Information managers face significant challenges in trying to collate, reconcile, validate and share data on humanitarian needs and response activities in the first few hours and days of an emergency – often duplicating efforts and reducing much of the time that could be spent analysing it for insights. The Humanitarian Exchange Language (HXL) is an open data standard that enables software to validate, clean, merge and analyse data more easily. It is managed alongside the Humanitarian Data Exchange (HDX), an open platform for sharing humanitarian data, by the Centre for Humanitarian Data.¹⁶ The IFRC and several National Societies – including Malagasy Red Cross and British Red Cross – have been using HXL, notably in conjunction with Quick Charts, an open HDX tool that powers data visualizations (Johnson, 2016).

Following Cyclone Enawo in Madagascar in March 2017, four core information products were needed to support operational decision-making: 3W maps (who is doing what where?), data collection templates, situation reports and needs assessment maps. The IFRC's information management delegate worked with the response team at the Malagasy Red Cross to collate data using a combination of Excel, QGIS and GPS. The team then used HXL and the HDX data platform to share data – and Quick Charts to visualize it (Centre for Humanitarian Data, n.d.). Together identifying the most appropriate tools and products allowed for smoother and faster data collection, analysis and sharing with the first responders, thus allowing for quick evidence-based decision-making. The Malagasy Red Cross team used their skills acquired during this response later the same year for the plague response.

Community Pandemic Preparedness Programme (CP3)

Humanitarian and development organizations are increasingly using sensors and crowd-sourcing tools, such as the pandemic surveillance systems deployed by The IFRC through the Community Pandemic Preparedness Programme (CP3) in Africa

16. The Centre for Humanitarian Data focuses on increasing the use and impact of data in the humanitarian sector. It is managed by OCHA as part of the Agenda for Humanity. It focuses on four areas: 1) data services, 2) data literacy, 3) data policy and 4) network engagement. It supports a range of activities, including directly managing HDX and HXL (see Centre for Humanitarian Data, n.d.)

and South-East Asia (see also *the Economist*, 2018). Initially piloting in 11 countries, the American Red Cross, the IFRC and National Society CP3 partners will work with country-level stakeholders to identify the core data sets essential in a disaster situation or health emergency. Up-to-date information on road networks, health infrastructure, climate patterns, disease incidence, population density and health behaviours can be vital in an outbreak. The Red Cross and Red Crescent team will work to locate, validate and openly release this information with its owners' permission. CP3 will leverage the Missing Maps network to ensure that communities are 'on the map'. These efforts will help to improve 'data readiness' for planning, implementing, monitoring and reporting during disaster response.

Data protection

While various humanitarian agencies have policies and guidelines on data protection – and while investments in data and information communication technology are enabling disaster information, preparedness and response efforts – operating in the new order represents a considerable challenge. In May 2018, the EU Global Data Protection Regulations (GDPR) came into force, prompting a thorough rethink of collection and storage of personal data (Parker, 2018). Yet considerations are not just limited to (data) protection and security. Better provision has to be made for the rights to information, protection from harm, data agency and to redress and rectification (Greenwood et al, 2017). Identified by the Signal Code, these rights are the result of a six-month study by the Signal Program on Human Security and Technology at the Harvard Humanitarian Initiative (HHI) and require investment. Not just financial investment in one-off tools, technology and 'innovations' but also in standards, partnerships and different ways of working (Greenwood et al, 2017).

“The scale of data, facilitated by modern information technology, is now such that state borders and discrete timescales are increasingly difficult to apply to data collection and processing. Data can be collected remotely, from populations which are unaware, and transmitted around the world in an instant. Once collected and transmitted, data live forever. Existing legal instruments and current interpretations do not always meet the challenges of the 21st century.”

THE SIGNAL CODE: A HUMAN RIGHTS APPROACH
TO INFORMATION DURING HUMANITARIAN CRISIS

7.2.3 Conclusions

Data can and should be a strong driver of decision-making in humanitarian response. However, a significant ‘pinch of salt’ is also needed, in light of the many assumptions and gaps that lurk behind the figures. The first is in the conception of what should be tallied – what counts as a disaster and what type of impact should be assessed. The second concerns those not captured even in definitional limits, for the many reasons explained in the preceding chapters. Data can also be actively harmful to the people it seeks to help, if the means of gathering, storing and analyzing it are not careful and sophisticated enough.

To address both the opportunities and the caveats, a ‘data-enabled’ rather than a ‘data-driven’ humanitarianism is needed – one that starts with understanding the rights of disaster-affected people and safeguarding against the potential dehumanization of humanitarianism (whereby data and new technologies become the central focus rather than the enablers). Investment should also be made in common standards, and in digital literacy and digital access, as vital components of humanitarianism – not as one-off, expendable overheads.

Finally, the humanitarian sector needs to get better at using the data it has, and not wait to act because not everything is known. It needs to do better at combining and using data from different sources and new technologies. In particular this includes citizen-generated data and data around community needs, perceptions and capacities.

7.3 Beyond the numbers: IFRC insights on recent trends in disaster management

While the data – and its limits – is very important, it cannot tell the whole story about how disaster management is evolving. This section examines progress in three areas of the IFRC’s work in disaster management:

- early action in climate-related disasters and epidemic response;
- progress in the ‘localization’ of humanitarian aid; and
- progress in the Red Cross and Red Crescent work in disaster law.

7.3.1 Early action in climate-related disasters and epidemics

Forecast-based financing

As already noted, one of the drivers for the increased number of IFRC operations during the last ten years is the increase in climate-related crises and their impact.¹⁷ Proactive risk reduction and climate change adaptation, aiming to address the underlying causes of vulnerability, promote resilience and strengthen anticipation and preparedness, is therefore a top programme priority for the IFRC.¹⁸

The international community has long recognized the value of the preparedness approach,¹⁹ and the need to act early to reduce the impact of disasters has been explored in detail.²⁰ The Early Warning Early Action agenda has spurred investments in climate and hydro-meteorological services, forecast information and communication protocols worldwide.²¹ For example, the World Bank has increased its investment in national ‘hydromet’ projects from 25 projects amounting to 270 million US dollars in 2010 to 67 amounting to 870 million US dollars in 2017 (GFDRR et al, 2018).

However, investments by the humanitarian community in the early warning side of the equation have not always resulted in fast-enough action. For example, months before the deadly food insecurity crisis that affected more than 13 million people in the Horn of Africa in 2011, forecasters had begun to ring alarm bells, but neither donor response nor humanitarian action were at scale until significant malnutrition had set in (Save the Children and Oxfam, 2012).

Many climate-related hazards can be forecast ahead of the impact, allowing time for action to be taken in the window between a forecast and a disaster. Recognizing this opportunity, forecast-based financing (FbF) is a mechanism that enables access to funding for early action and preparedness for response based on a specific weather forecast and risk analysis. The IFRC has been working on this concept since 2008, with support from the German government and other partners. A key element of FbF is that resource allocation is agreed in advance, together with the forecast that will trigger their release. The

17. 53.7% of the crises to which IFRC international operations have responded over the last ten years have been triggered by weather-related events. Floods are by far the largest single trigger – accounting for 32.6% of all triggers since 2008.

18. In 2017 the IFRC and National Red Cross and Red Crescent Societies invested 253.5 million CHF (254.9 million US dollars) on disaster risk reduction (DRR) projects and more than 12% of voluntary contributions focused on DRR, reaching 47.8 million vulnerable people. Substantial DRR investment was made in Asia Pacific (37% of IFRC DRR funding) and Africa (26%). The DRR projects were implemented by 139 National Societies with a per-capita DRR investment of around 5.3 CHF (5.3 US dollars). Currency conversion as of 9 August 2018 using [xe.com](#).

19. For example, the Paris Agreement on Climate Change, adopted in 2016, was the first global legally binding agreement to include an ambition to build climate resilience. The Hyogo Framework for Action, and the Sendai Framework for Disaster Risk Reduction both stress the importance of preparedness and risk reduction, as do numerous UN General Assembly resolutions.

20. The *World Disaster Report 2016* looked at a cost–benefit analysis of DRR (IFRC, 2016b, p. 83) and summarized the IFRC’s 2015 series of studies in Nepal, Philippines, Sudan, Viet Nam, Bangladesh, Ethiopia, Georgia, Tajikistan, Zambia, Namibia and Rwanda. A more recent study looked at 117 case studies between 1996 to 2015, canvassing various types of disasters, and looking at prevention, preparedness and risk transfer measures: see Hugenbusch and Neumann (2016). The main findings were that: 1) the cost benefit ratio changes based on various factors: the human development index of the country, the nature of the disasters, the nature of the measures taken (preparedness versus prevention); 2) preparedness measures were on average more cost-efficient than prevention measures; 3) cost effectiveness was higher in countries with lower humanitarian development index scores; 4) DRR in droughts, floods and hydro-meteorological hazards were assessed to be cost effective; (5) in 87% (102 out of 117) of case studies, the cost–benefit ratio supported the investment in DRR.

21. The *World Disasters Report 2009* was dedicated to Early Warning Early Action (IFRC, 2009).

roles and responsibilities of all involved in implementing the actions are defined in early action protocols.

In collaboration with partners, 19 National Societies in Africa, the Americas and Asia-Pacific are at various stages of implementing FbF pilot projects.²² With the FbF methodology, forecasts have successfully triggered early action by National Societies in Peru, Togo, Uganda, Bangladesh and Mongolia. To scale up this anticipatory approach, IFRC has also just established a new funding mechanism, the Forecast-Based Action by the DREF²³ to enable National Red Cross or Red Crescent Societies to access predictable funding for early action. The funding will be directed towards activities pre-identified in early action protocols, triggered by hazards that can be scientifically forecast based on hydro-meteorological risk data and observations.

The IFRC is not alone in developing and pioneering the FbF approach, other partners such as the World Food Programme, Food and Agriculture Organization and the Start Network have also been exploring and implementing approaches based on similar principles. FbF and similar anticipatory early action approaches being pursued by other partners are attracting more support, particularly as they can serve as a bridge between humanitarian development and climate funding, and ensure better preparedness for changing climate risks across timescales.

However, working with the concept of probability, predicted severe impacts do not always materialize even after the funding has been released, as seen in a few cases in the implementation of FbF, such as in Peru and Uganda. Nevertheless, FbF is designed so that the risk of acting in vain is outweighed by the likely benefits of preventing or preparing for disaster and over time the negative consequences of not taking early action are greater than occasionally acting in vain (Coughlan de Perez et al, 2014).

Box 7.3 Forecast-based financing in practice in Bangladesh

As predicted by meteorologists, extensive rainfall at the end of July 2017 caused severe flooding in areas along the Brahmaputra River in Bangladesh. Many people had to leave everything behind and flee, houses were badly damaged, poor families’ belongings in the affected areas were destroyed – and yet, the consequences in four communities were less devastating than in comparable floods in the past. Up to five days before the flood peak was reached, Bangladesh Red Crescent Society with support from the German Red Cross had already initiated early action. The population received early warning messages and cash was distributed to 1,039 vulnerable households. This cash allowed the families at risk to buy what they needed to survive and to bring themselves to safety without getting into debt or selling their property.

This successful intervention was possible because financial resources were made available before the disaster hit in the framework of FbF. In the case of Bangladesh, the FbF team made up of the Bangladesh Red Crescent Society, German Red Cross and the Red Cross Red Crescent Climate Centre jointly with the national hydro-meteorological

22. Ecuador, Peru, Mali, Togo, Zambia, Zimbabwe, Mozambique, Niger, Ethiopia, Sudan, Kenya, Malawi, Uganda, Mongolia, Bangladesh, Nepal, Philippines, Viet Nam, Indonesia, Solomon Islands, Tanzania and Haiti.
23. See [Forecast-based financing fund](#).

services had established forecast thresholds for floods for the target regions in advance. This followed extensive assessments in the communities as well as analysis of past extreme events and available forecasts. Once the main humanitarian impact of such extreme weather events on the population had been identified – through discussions in the communities, but also surveys, studies and historical data – the FbF team selected those early actions considered most appropriate to mitigate these impacts in the communities.

An evaluation of the impact of the Bangladesh FbF pilot showed that the number of people who had to take on loans or who lost livestock during the flood was significantly lower in the FbF communities than in neighbouring areas. Hence these people recovered much more quickly and will undoubtedly be more resilient to facing similar disasters in the future.

Despite good progress, there is still a long way to go for anticipatory approaches like FbF to be adopted as a new normal (Wilkinson et al, 2018). More governments should implement the approach into their disaster risk management frameworks, plans and laws. More donors should make flexible, trigger-based financing available, notwithstanding the risk that the forecasted event may not occur. More agencies should engage in FbF schemes. It is time to bring FbF to scale.

Early action on epidemics

The 2014 and 2015 Ebola outbreak that killed more than 11,000 people across three countries served as a wake-up call for the international humanitarian sector. This experience made very clear that much swifter action will be needed to avoid major loss of life, both in detection and acting to contain and prevent the spread of such diseases.

The focus at the policy level on health security and pandemic preparedness, including national implementation of the International Health Regulations, has increased and remains a top priority. At the 2018 World Health Assembly, the Global Preparedness Monitoring Board was launched to monitor and report on the status of emergency health preparedness (WHO, 2018a).

The key question, however, is whether there has been any change in domestic preparedness and in the speed of response by the humanitarian sector. Box 7.4 shows there are encouraging signs it has.

Box 7.4 Comparing haemorrhagic fever outbreaks in 2014, 2017 and 2018

Ebola in West Africa (Guinea, Liberia and Sierra Leone), 2014–2016 (2.5 years)
Ebola was first publicly identified in Guinea on 14 March 2014. The Guinean Government declared the outbreak eight days later, on 22 March. The first WHO report was released the following day and WHO reported 49 cases of the disease, including 29 deaths in Guinea. Five days later the IFRC launched its appeal, but money was slow to come in, and almost a month later there was only 14% coverage. On 8 August, WHO declared the epidemic a “public health emergency of international concern”. By September,

the Red Cross had active operations in 11 countries and more than 3,500 volunteers were involved in the response, targeting more than 35 million people with education and sensitization programmes. It was not until January 2016 that Liberia declared there was no more presence of Ebola. Sierra Leone followed in May and Guinea in June 2016 – two and a half years after the first case was discovered, the outbreak ended with more than 28,600 cases and 11,325 people having died.

Marburgh in Uganda, 2017 (six weeks)

The October 2017 Marburg outbreak began in a remote community on the border of Kenya and Uganda. There was only 24 hours from diagnosis to deployment of international support, with the Ugandan and Kenyan governments, local responders (including the Uganda Red Cross Society and Kenya Red Cross Society), and international responders (including WHO, UNICEF and Médecins Sans Frontières (MSF)) responding quickly.²⁴ The disease was contained (despite its outbreak near an international border), with only three deaths (two confirmed and one probable) and six cases. Health workers followed up with close contacts of the patients in Uganda and Kenya to make sure they had not caught the illness. On 8 December, roughly six weeks after the start of the outbreak, the Ugandan Ministry of Health declared the outbreak contained. As a different kind of hemorrhagic fever, Marburg spreads more slowly than Ebola, but the contrast in the time needed to contain it is still quite striking.

Ebola in the Equateur region of the Democratic Republic of the Congo, 2018 (12 weeks)

On 3 May 2018 health authorities in Equateur province of DRC notified authorities of expected Ebola cases. The outbreak was verified on 8 May. The Ministry of Health began mobilizing partners, and soon mobile laboratories were fully operational in key hotspots. Shortly afterwards, 21 people were confirmed as having caught Ebola. Three days later (19 May) more than 7,000 doses of the vaccine arrived in Kinshasa. By 24 May, 16 days after the outbreak was identified, more than 150 people had been vaccinated. Within 35 days of the first verified case the number of cases had plateaued with 28 people having died, 38 confirmed cases of people infected and 14 possible cases. The outbreak was declared officially over on 24 July 2018 by WHO and DRC Ministry of Health, 42 days (two incubation periods) after blood samples from the last confirmed Ebola patient twice tested negative for the disease. In total, 33 people died..

This chart shows a more serious and rapid response. The humanitarian sector is shifting time scales; scaling up responses with just a handful of cases; and focusing on tiny, fast responses to stop the disease quickly at its source, if possible. This is clearly a successful approach and gives greater hope of being better able to confront future outbreaks.

24. In terms of joint activity to address the outbreak, the response was led by health authorities in Uganda and Kenya. They received support from WHO, the Global Outbreak Alert and Response Network, the US Centers for Disease Control and Prevention, the African Field Epidemiology Network, UNICEF, MSF, IFRC, ICRC, the Uganda Red Cross Society, the EU Commission's Civil Protection Mechanism and Emergency Response Coordination Centre, the Bernhard Nocht Institute for Tropical Medicine and University of Marburg, Germany, the EU's European Mobile Lab Consortium, Alliance for International Medical Action, the Uganda Virus Research Institute, Joint Mobile Emerging Diseases Intervention Clinical Capability, Infectious Diseases Institute of Makerere University, the Kenya Red Cross Society and the Kenya Medical Research Institute (see WHO, 2017a).



DRC, 2018

Barnabe Looma, Chief of Office Volunteer with the DRC Red Cross runs a team of volunteers who conduct safe and dignified burials in the community surrounding Mbandaka, DRC. The Red Cross has taken the lead on the crucial Safe and Dignified Burials pillar of the response, as requested by the Congolese Ministry of Health.

Fig. 7.22 Comparison of Ebola caseload and response times between the 2016 West Africa Ebola outbreak and the 2018 DRC Equateur outbreak

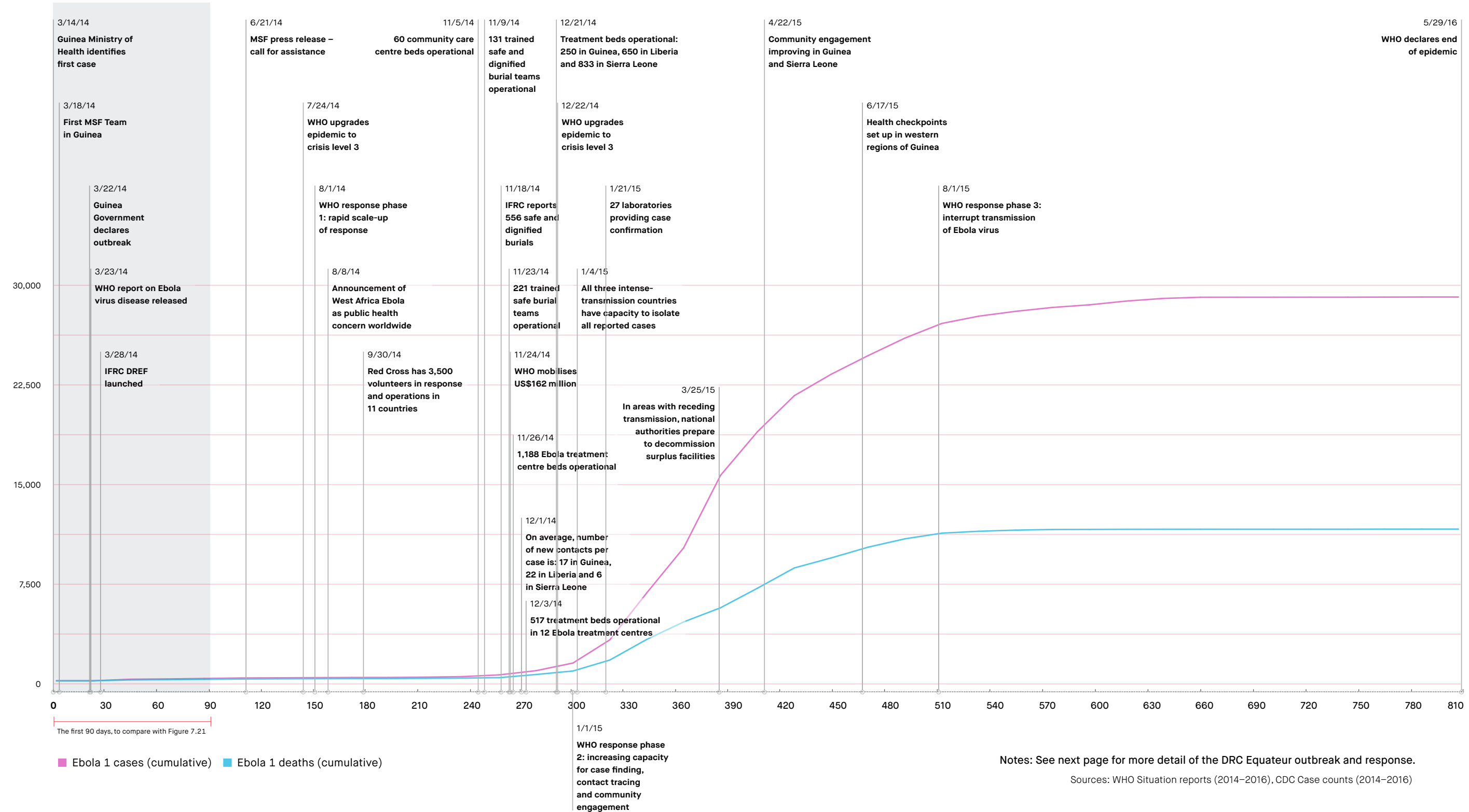
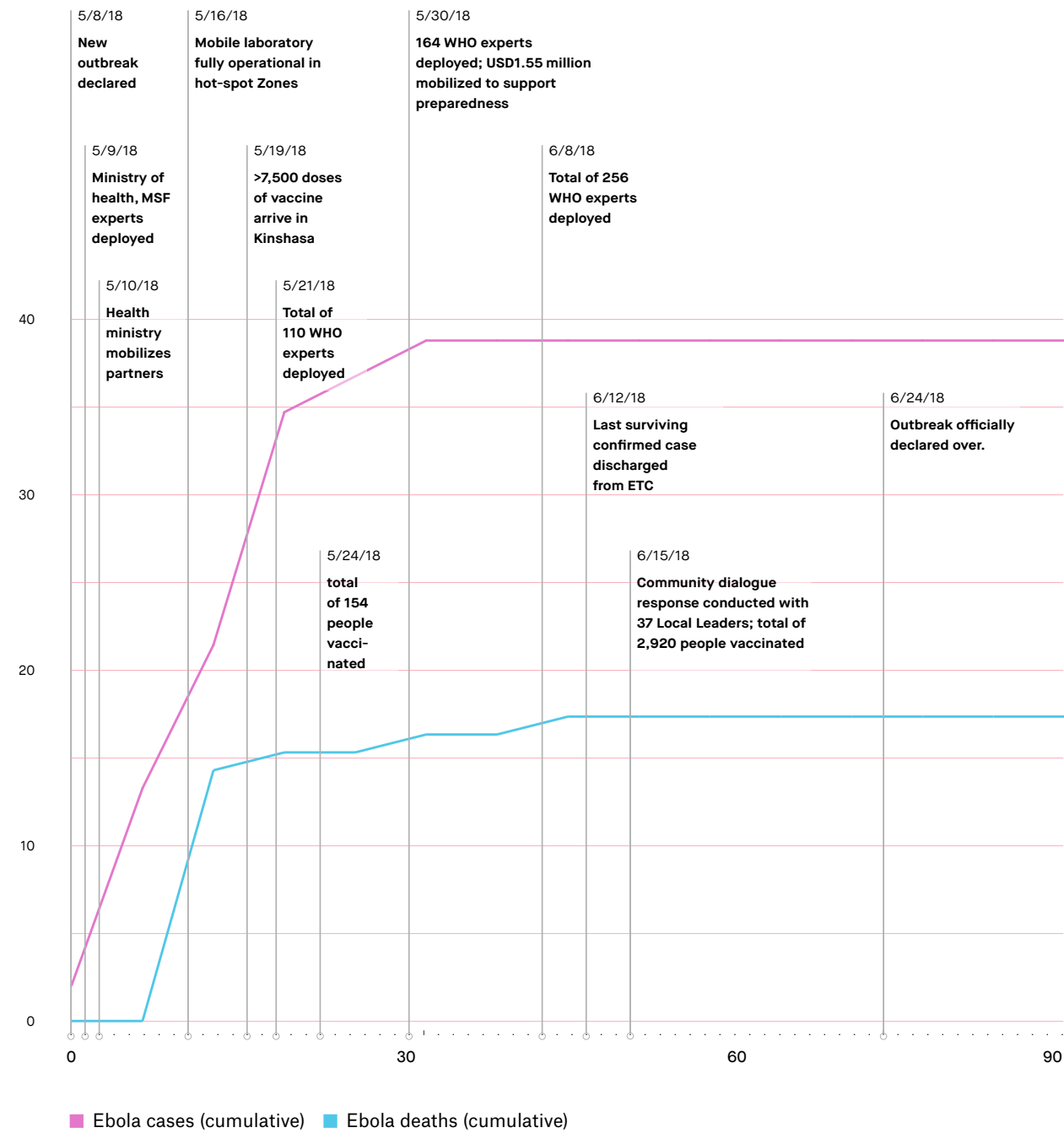


Fig. 7.23 DRC Equater Ebola response, 2018



Notes: Figure 7.23 only relates to the Ebola outbreak in the Équateur region of DRC in 2018 and not the later separate outbreak in the Kivu which was ongoing at the time of finalization of the report.

Source: WHO 2018b.

Various factors are crucial to a successful response that quickly quells a disease before it is able to spread; firstly, experience at both diagnosis and response in the community where the outbreak takes place. For example, in the case of the 2017 Marburg outbreak, the location was known as a hotspot for haemorrhagic fever and Uganda had experience in identifying and managing Marburg virus disease outbreaks. A strong community-based surveillance network and a good relationship between the responders on the ground and the Ministry of Health is important so that when the alarm is raised, it is taken seriously.

“ While outbreaks are inevitable, pandemics, if addressed early, are for the most part preventable. Money and support delivered at the right time can save lives and economies”

WORLD BANK PANDEMIC EMERGENCY FINANCING FACILITY

To enable a fast and effective response, financing also needs to be fast and therefore a number of organizations, including the IFRC, pre-financed the response to the Marburg crisis. While FbF does not exist in the same way for epidemics as it does for floods, it is an important approach to explore. It may make particular sense for certain diseases such as cholera, where the factors likely to lead to an outbreak before the first case has been seen are known. UNICEF, WHO and MSF have responded quickly with their own funds (which requires having already raised unearmarked funding), including in the most recent Ebola outbreak. The World Bank’s newly created Pandemic Emergency Financing Facility, which is being used for the first time during the May 2018 Ebola outbreak in DRC (*Financial Times*, n.d.), will hopefully facilitate a more rapid response in future outbreaks too (World Bank, 2017).

7.3.2 Local actors: recognized in words, but not in deeds

The *World Disasters Report 2015* focused on local actors as the key to humanitarian effectiveness. The Charter4Change,²⁵ a commitment by some international NGOs, was launched the same year. Since then, the international humanitarian sector has increasingly recognized the significant role of local humanitarian actors in particular due to their significant engagement during the World Humanitarian Summit preparatory consultations and the commitments made by some of the largest humanitarian donors and agencies in the Grand Bargain in 2016. In the Grand Bargain, signatories committed, under the heading of “more support and finding tools to local and national responders,” to “making principled humanitarian action as local as possible and as international as necessary” while

25. [Charter4Change](#) describes itself as “An initiative, led by both National and International NGOs, to practically implement changes to the way the Humanitarian System operated to enable more locally-led response”.

continuing to recognize the vital role of international actors, in particular in situations of armed conflict. Commitments were made in funding, capacity development, partnership and coordination.

There have been some small steps forward since,²⁶ but there are many remaining systemic challenges towards increased investment in effective, principled and sustainable local humanitarian action.

Box 7.5 Local action beyond the headlines

The IFRC’s experience has highlighted the significant yet little-known work of local and national actors across a range of countries with various rankings on the Human Development Index. In the last ten years, the IFRC’s international operations have responded to 1,107 crises, and in the first quarter of 2018 there were 53 ongoing, internationally funded operations covering 50 countries and targeting more than 19 million people for assistance. At the same time National Societies have each responded to many more such disasters every year in their own countries without any international assistance. For example, from July 2016 to June 2017, American Red Cross responded to 260 “large-scale disasters” in 45 states and two US territories including wildfires, storms and flooding (American Red Cross, 2017).

Mexican Red Cross responded to a significant earthquake and two major tropical storms in 2017, as well as a hurricane and floods in 2016. For the earthquake, Mexican Red Cross mobilized 1,200 search and rescue team members, established 16 collection centres with 31,000 volunteers and delivered 4,507 tonnes of humanitarian aid to more than 1 million people in need. There was a small amount of international support provided for the earthquake response (some direct financial support as well as additional search and rescue personnel from other National Red Cross Societies in the region) but all the other disaster response initiatives were without formal international support.

Similarly, in 2016 Kenya Red Cross Society reached more than 3 million people, including responding to a cholera epidemic that affected 30 of its 47 counties, the Chikungunya epidemic, floods in 4 counties including Nairobi, the impact of conflicts and attacks on communities in 4 counties, and residential and commercial building collapses. But few of these crises hit the international news or led to an appeal for international assistance.

Time to recognize and promote the crucial role of local and national actors

The capabilities and contributions of local and national humanitarian actors are often significant. One example is the Turkish Red Crescent leadership in providing cash to 1.3 million registered refugees each month (see Box 7.6). Turkish Red Crescent is now looking at how it can support other National Societies to scale up their cash programming.

26. For a review of Grand bargain implementation, including the commitments to local and national responders see Metcalfe-Hough et al (2018) and IFRC, (2017b).

Box 7.6 The biggest humanitarian cash transfer programme in the world today – Turkey

Turkey hosts more refugees than any other country. There are 3.3 million registered refugees in Turkey, of whom around 3.2 million are Syrian. Just under half of Syrian refugees (around 46%) are children. More than 90% of refugees reside outside of camps.

The Government of Turkey has played a central role in supporting the refugee crisis, contributing more than 25 billion US dollars since 2011 (AFAD, 2017). International funding for the response has also increased year on year from 80 million US dollars in 2012 to 795 million in 2017. Through Turkish Red Crescent (Kizilay), cash transfer programming (including vouchers) has been a part of the response since 2012 and cash assistance since 2015.

In 2016, negotiations between the Government of Turkey and the European Commission resulted in allocation under the EU Humanitarian Implementation Plan of 348 million euros (403.5 million US dollars) to establish an Emergency Social Safety Net, the biggest cash programme in the world today. The programme provides monthly basic needs assistance to more than 1 million refugees through multipurpose grants. It builds on existing systems that underpin the Government of Turkey’s social protection system for citizens. It was designed in conjunction with the government and is implemented through a partnership between World Food Programme (WFP), Kizilay, the Ministry of Family and Social Policies, the Directorate General for Migration Management, the Directorate General of Citizenship and Population Affairs, and the Disaster and Emergency Management Presidency (AFAD). Payments on the Emergency Social Safety Net and Conditional Cash Transfer for Education programmes are by automated teller machine (ATM) card called KizilayKart, through a separate agreement with Halk Bank, contracted by Turkish Red Crescent.

The role of Kizilay in implementing and delivering cash grants is core to this massive programme. The WFP and government partners are recognizing the unique role of Kizilay and are choosing to invest in the systems and processes of a local organization in the form of the National Society.

However, while the Grand Bargain implicitly recognizes the important role of local actors, there was neither specific recognition of existing capacities nor a formal call for this recognition. Conversely, the Charter4Change commitments (Charter4Change, 2015) acknowledge the role and work of local actors and seek to ensure recognition for their role. Signatories committed to:

“Promoting the role of partners to the media and the public. In any communications to the international and national media and to the public we will promote the role of local actors and acknowledge the work that they carry out, and include them as spokespersons when security considerations permit.” (Charter4Change Commitment 8)

Without such recognition, local actors will likely continue to struggle to obtain funding and other support for their efforts.

Value of local partnering and local resourcing

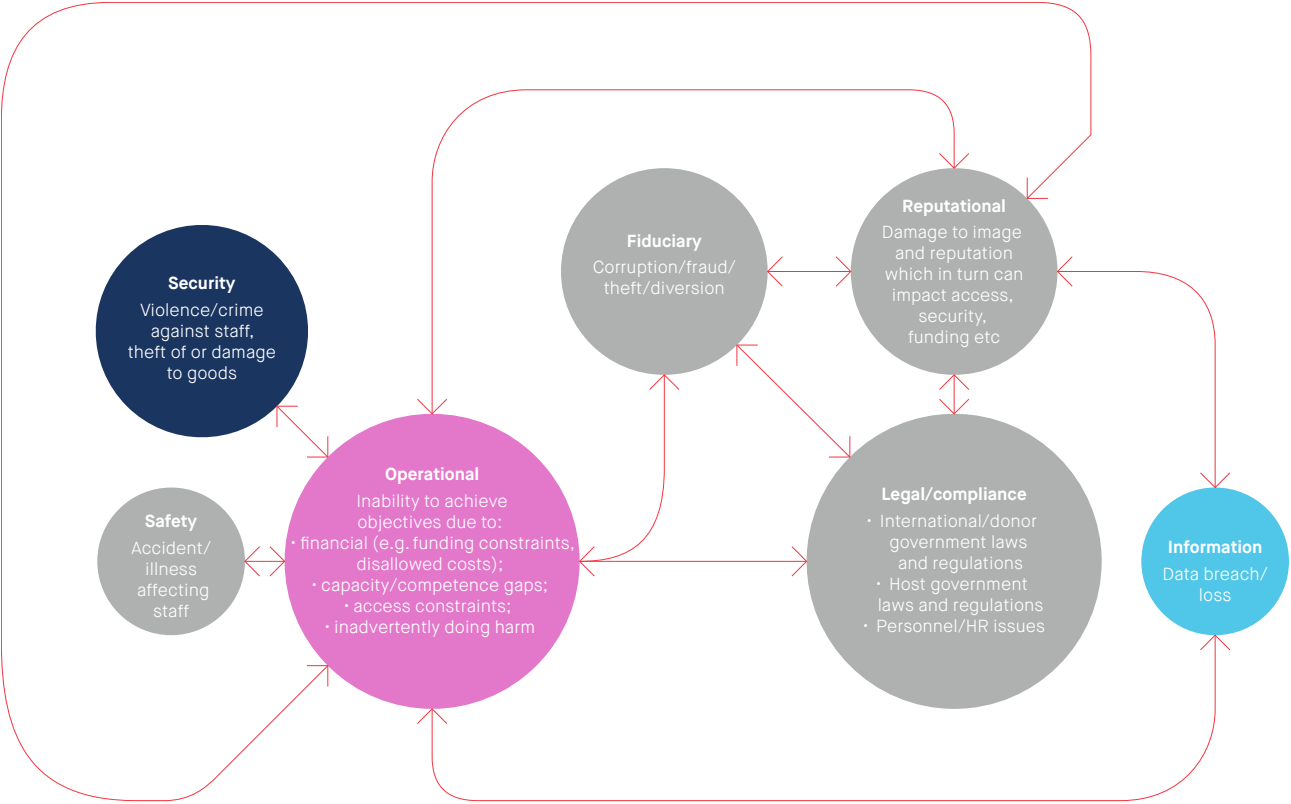
International assistance is often most successful where it serves as a catalyst or a multiplier for local solutions, including bringing together diverse partners (from civil society, national and local government, the private sector and academia among others) who can share expertise, financial and material resources, and access to other networks for further support. For example, KCB Bank, Safaricom, and the Kenya Red Cross partnered in 2012 in the Kenyans for Kenya campaign (IFRC, 2017d) raising 10 million US dollars in Kenya for drought relief.

To remain relevant, humanitarian networks will need to be able to broker these types of partnerships in locations all around the world. The One Billion Coalition for Resilience, led by the IFRC, UNICEF, WFP and the UN Connecting Business initiative, is building on these lessons and insights to advance strategy and practice for network-wide partnering through a do-it-together approach to collective action and impact for community resilience-building.

Who bears the risk?

One notable absence in the localization commitments adopted in recent agreements has been the conversation about risk and risk sharing. These risks include security risks to staff and volunteers working for local actors, risk of a programme not being delivered or not meeting its objectives and risks around fraud, corruption and other legal or code of conduct violations by people working for a given organization.

Fig. 7.24 Risk categories



Note: HR: human resources.
Source: Based on Stoddard et al (2016a)

Recently donors and the humanitarian sector more broadly have increased their focus on issues of integrity. Complex operating environments come with increased risks in a variety of areas, large amounts of funding flows, rapid scale-ups and limited oversight. At the same time, while the aid sector is perceived as being made up of ‘good people’, it remains made up of people, with their strengths and weaknesses, including criminality. These challenges affect all organizations (international and local) and all steps should be taken to minimize these risks, but they can never be reduced to zero.

Many international actors simply push the risk down the line. One irony of the localization agenda is that international donors, which signed up to the same Grand Bargain localization commitments as international NGOs, UN agencies, ICRC and the IFRC, are often reluctant to shoulder any additional risks associated with working with new partners. While donors committed to increase the amount of funding they channel “as directly as possible” to local and national actors,²⁷ many wish to see international intermediaries continue to bear full responsibility for how funds are spent and reported.

27. The current definitions and categories for as-direct-as-possible funding (as agreed by the Grand Bargain signatories) include funding directly from donor to local or national actor, via a pooled fund or one intermediary (see Inter-agency Standing Committee, n.d.).

Resources and time were needed to develop the policies, procedures and mechanisms that donors have come to expect from their familiar partners, the large international humanitarian organizations. Without capacity investment, many small local actors will struggle to keep up and will be deemed ineligible by donors. If the international community is serious about localization and accountability, it will take real investment and support to local actors to develop and implement the necessary policies and procedures.

7.3.3 Getting the rules right: developments in disaster law

Law can play a fundamental role in the entire disaster risk management spectrum, from ensuring that adequate risk reduction measures are in place, such as building codes and land use plans; to outlining clear roles and responsibilities for local actors; and ensuring the rights, roles and responsibilities of the most vulnerable people are considered and protected.

IFRC research and consultations with responders and officials around the world have revealed consistent barriers to effective operations due in large part to the absence of clear national procedures or regulation. These include unnecessary regulatory bottlenecks to speedy aid (such as delays with visas, customs and landing rights) but also difficulties for national authorities to exercise their leadership and oversight (for example, where international responders fail to coordinate, or provide poor quality aid). Disaster law frameworks are crucial for addressing these issues and for placing authorities in the driver’s seat.

November 2017 marked ten years since the adoption of the ‘International Disaster Response Law (IDRL) guidelines: for the domestic facilitation and regulation of international disaster relief and initial recovery assistance’ by the state parties to the Geneva Conventions at the International Conference of Red Cross and Red Crescent National Societies across the world have since supported their authorities to implement the recommendations, resulting in new laws and procedures in more than 30 countries, three regional treaties, and practical support in simulation exercises and operations.²⁸

While this level of progress appears to compare well with the implementation of similar international guidance documents, it still means that a great many states have yet to adopt comprehensive rules for managing international disaster assistance (IFRC, 2015c). Moreover, recent research indicates that regulatory problems continue to burden international operations (ibid). While National Societies and the IFRC remain committed to the slow and steady work of promoting regulatory preparedness in this area, they are also now more often promoting quicker, less politically heavy approaches, such as national guidelines, manuals and standard operating procedures, notwithstanding the risk that they may not be able to override inconsistent laws. Moreover, regional and cross-border solutions are starting to show promising results, as Box 7.7 shows.

28. For the latest updates on the drafting and adoption of national disaster laws based on the IDRL Guidelines and other IFRC tools, see the [interactive disaster law map](#).

Box 7.7 Improved cross-border preparedness in North America

Mexico, the US and Canada share common borders and a common vulnerability to a variety of disasters. These three countries have significant experience preparing for and responding to earthquakes, hurricanes, floods, fires and other events. But what about a truly catastrophic incident in North America that overwhelms one of their capacities to respond? How could they work together as a region to provide a rapid and effective response?

This question was central to the North American Humanitarian Response Summit project, implemented by the American Red Cross in partnership with the Canadian Red Cross, the Mexican Red Cross and with the direct participation of their respective governments. The project’s goal is to improve the effectiveness of cross-border response to a potential catastrophic disaster in North America. A multinational legal and policy scan and analysis were conducted as part of this process, to assess the political, legal and diplomatic operating environment within and across the three countries and the current state of readiness in key areas related to cross-border disaster response (Bookmiller et al, 2017). The following problem statement emerged from this analysis:

“There exist many different efforts (laws, legal authorities, compacts, memoranda of understanding, projects) related to strengthening cross border support during crises in North America. However, there is limited comprehensive understanding of these various efforts beyond the entities directly involved in the development and maintenance of them. The effect of this siloed approach within countries and across the three countries (Canada, Mexico and the United States) combined with bureaucratic barriers will impede response efforts particularly during a catastrophic response when the rapid flow of humanitarian assistance (professional personnel, equipment and supplies) will be required to save lives and reduce suffering.”

To start addressing this issue, a series of country-level preparatory meetings were held to discuss operational response levels with North American disaster response practitioners and policy experts. These dialogues culminated in the North American Humanitarian Response Summit, convened in Washington DC in March 2018. The issues on the table ranged from determining national requirements and triggers for accepting international assistance, to how best to facilitate the cross-border movement of goods and personnel, and how to ensure solid accountability measures.

Through this process, a shared commitment was fostered among the regional actors. The possibility to develop a legally binding regional cooperation agreement was also put on the table, emphasizing the value of regional collaboration in case of disasters – and having the necessary legal frameworks to support this.

As National Societies have increased their technical support to the national governments, requests have likewise increased for more comprehensive advice about how law can best address the full disaster risk management spectrum. From 2012 to 2014, the IFRC partnered with the UN Development Programme (UNDP) to carry out one of the largest comparative studies of law and DRR, looking at 31 countries (IFRC and UNDP, 2014). They found

that, in many cases, even in the most recently adopted laws, a focus on DRR has not penetrated very deeply and there are still significant gaps. This is particularly in how DRR is addressed in laws related to urban planning, water use, environment, development planning, and in the clarity of roles and responsibilities across government. Drawing on these findings and extensive consultations, IFRC and UNDP developed a checklist on law and disaster risk reduction in 2015.

Another increasing area of concern relates to protection issues in disaster legislation. By way of example, a 2017 IFRC study of law and sexual and gender-based violence (SGBV) in disasters (IFRC, 2017a) found little mention of SGBV in disaster laws and policies, an absence of coordination between SGBV protection mechanisms and disaster management institutions, and little “business continuity” planning for addressing heightened SGBV risks when police, courts and support services were themselves impacted by disasters. This and similar protection issues are the subject of a new IFRC checklist project now underway.

7.3.4 Conclusions

The available data on disasters shows that, notwithstanding advances with DRR, hundreds of disasters are still occurring every year, impacting millions of people. The data also shows the immense human and economic costs imposed by disasters. At the same time, the data hides some truths – the small disasters never captured, the communities not on the map, the differing experiences of different communities, the reasons for these different experiences.


Operationally, National Societies are reaching hundreds of millions of people affected by disasters, in large and small events, all over the world. For its part, IFRC is likewise continuing to deploy around the world – but a significant proportion of its appeals and deployments have to return to the same countries due to a combination of long-standing complexity, fragility and disaster risk. The need for reinforced efforts to build community resilience, reduce exposure and reduce risk remains just as urgent as when the last edition of this report raised the issue in 2016.

At the same time, there is good news to share (and examples to emulate) in concrete steps towards early action – both in climate-induced disasters and epidemics. The IFRC and its partners are making tangible progress in reaching people before it is too late. Likewise, National Societies’ decade-long support to their governments on disaster law is showing its fruits in the form of modernized laws and policies and a greater understanding of the ways laws can make a difference. In the area of localization of aid, as highlighted in the 2015 edition of this report, very important commitments were undertaken by donors and international agencies, but still very slow progress has been made in turning these new attitudes into greater funding, respect and support.



Sanaa, Yemen, 2017

Yemen Red Crescent (YRCS) water point in Sanaa city centre. There is a severe water shortage in Sanaa, as well as the rest of Yemen, which is exacerbated by the conflict. According to Mohammed H. Al Fakeeh, head of programs for YRCS: “Within this conflict, the water supply, in this area and many areas in Sanaa city, has almost disappeared.” With limited access to healthcare services, the breakdown in safe water supplies and failure of sewage system increases the incidence of water borne diseases, including cholera.



Equateur, DRC 2018

Mirielle Miguanga, a paediatrician from the Centre Hospitalier Universitaire de Mbandaka treats her six-month old patient, Narcis, with his mother Raphine by his side. Mirielle has recently been trained how to respond better to potential cases of Ebola. The Red Cross team have provided specialised training in Ebola infection prevention control and erected pre-triage rooms to separate Ebola cases from the general public. Local health care workers like Mirielle are essential to quelling the outbreaks of Ebola and other diseases.

©Corrie Butler/IFRC