### **Executive summary**

Disasters brought on by natural hazards force millions of people to flee their homes each year across all regions of the world. The displacement caused is a global phenomenon, and its growing scale, frequency and complexity pose huge challenges for exposed and vulnerable populations, governments, humanitarian and development organisations and disaster risk managers.

As most disasters are as much man-made as they are natural, much more can be done in order to strengthen community-based and national resilience to prevent the worst impacts of natural hazards, and to better prepare for events that cannot be avoided. Policies and practice that protect and respect the rights of displaced people and those at risk of displacement, and that target their specific needs, can play a vital role in mitigating impacts, breaking recurrent patterns and avoiding protracted situations.

Now is an opportune moment for policymakers to ensure that displacement issues are better addressed in post-2015 goals and frameworks for international action on disaster risk reduction and sustainable development, which are currently under preparation. Governments must make certain that climate change adaptation plans and donor commitments give due attention to the increasing risk of displacement, including by facilitating migration and planned relocation in ways that respect the rights of vulnerable populations. Consultations ahead of the 2016 World Humanitarian Summit should also ensure that displacement is considered in the context of disasters, conflict and mixed crises.

### Purpose and scope of this report

IDMC's Global Estimates report, the fifth of its kind, aims to equip governments, international and regional institutions and civil society with up-to-date estimates and analysis of the displacement disasters cause and to identify trends as the basis for evidence-based dialogue and decision-making. The report presents estimates for 2013, and for each of the five preceding years. It also uses a prototype method to model the broad, historical trend in displacement since 1970.

Our data for 2008 to 2013 identifies displacement in 161 countries, and the historical dataset includes disasters reported in 194 countries. Both include disasters associated with geophysical hazards such as earthquakes and volcanic eruptions, and weather-related hazards such as

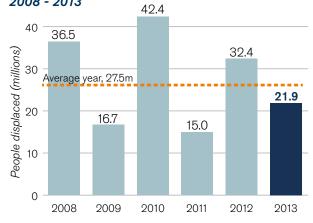
floods, storms, landslides, cold snaps and wildfires. The report also includes findings from countries where both natural hazards and conflict have caused displacement, with a spotlight on the complex and growing crisis in South Sudan.

Our Global Estimates reports do not capture figures for prolonged displacement following disasters in previous years, or for ongoing displacement over the year in which they started. Ad hoc case studies and reports exist on such situations, but post-emergency monitoring and reporting on protracted situations is generally poor and constitutes a significant global blind spot.

We arrived at our estimates for 2008 to 2013 by compiling, cross-checking and analysing reports from a wide range of sources, including governments, national disaster loss databases, humanitarian clusters and working groups, UN agencies, the International Organisation for Migration (IOM), the International Federation of Red Cross and Red Crescent Societies (IFRC), NGOs, research institutions, the media and private sector organisations. The methodologies used are detailed in annex A of the report.

## The global scale of displacement: patterns and trends

The scale of global displacement by disasters, 2008 - 2013



Source: IDMC estimates as of 22 August 2014

### 2013

 Almost 22 million people were displaced in at least 119 countries, almost three times as many as were newly displaced by conflict and violence.



Women, walking with what possesions they can carry, arrive in a steady trickle at an IDP camp erected next to an AMISOM military base near the town of Jowhar, Somalia. Heavy rains in Somalia, coupled with recent disputes between clans, has resulted in over four thousand IDPs seeking shelter at an AMISOM military base near the town of Jowhar, with more arriving daily. AU UN IST Photo / Tobin Jones, November 2013

- Thirty-seven of the 600-plus recorded events involved the displacement of more than 100,000 people. Typhoon Haiyan, which caused the largest displacement of the year, forced a million more people to flee their homes in the Philippines than in Africa, the Americas, Europe and Oceania combined.
- Mass displacements are frequent in countries most exposed and vulnerable to natural hazards. In the Philippines, three major disasters struck in the space of four months - typhoon Haiyan displaced 4.1 million people, typhoon Trami 1.7 million and an earthquake in the Central Visayas region 349,000. The latter was the world's largest displacement of the year triggered by an earthquake.
- As in previous years, most of the largest displacements took place in populous Asian countries. Typhoons, floods and earthquakes in China and the Philippines accounted for 12 of the 20 largest displacements.
- Rainy season floods in sub-Saharan Africa triggered five of the 10 largest displacements relative to population size. Four took place in Niger, Chad, Sudan and South Sudan - neighbouring, semi-arid countries of the Sahel region with highly vulnerable populations who are also affected by drought and conflict. The fifth took place in Mozambique.
- The extent to which populations in the most developed countries are exposed to hazards also led to some of the world's largest displacements. Typhoon Man-yi in

the Chubu region of Japan displaced at least 260,000 people and floods in Alberta, Canada displaced 120,000.

#### 2008 to 2013

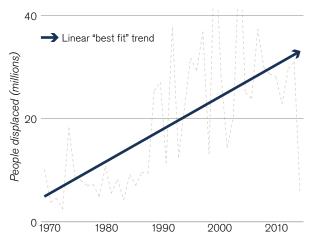
- Disasters displaced an average of 27 million people each year between 2008 and 2013. There are significant differences in the estimates from year to year, but the annual total has always exceeded 15 million.
- Major disasters are irregular and relatively infrequent, but they cause displacement on a vast scale when they do occur. Thirty-five disasters that each forced more than a million people to leave their homes accounted for 70 per cent of all displacement over the six-year period.
- Relatively small but far more frequent events tend to be under-reported. Figures for such events are, therefore, likely to be significant underestimates and their repeated and cumulative impacts are poorly understood. Increased investment in disaster risk reduction measures, such as better urban planning, the maintenance of flood defences and the introduction of building standards for housing and other infrastructure that can withstand smaller-scale hazards, could prevent or mitigate much of their impact.

#### Trends since 1970

 Significantly more people are displaced by disasters now than in the 1970s. In absolute terms, the risk of displacement is estimated to have more than doubled in four decades.

- A number of factors help to explain the rising trend:
  - More people are exposed to natural hazards and affected by disasters than 40 years ago, particularly in urban areas of more vulnerable countries. The global population has increased by 96 per cent since the 1970s, and urban populations have grown by 187 per cent. Urban populations in developing countries have risen by 326 per cent.
  - Improvements in disaster preparedness and response measures, including early warning systems and emergency evacuations, mean that more people now survive disasters but many of the survivors are displaced.
  - The collection of data on disasters and the displacement they cause has improved. We know more about the impacts of disasters that occur now than we did about those that happened 40 years ago. That said, large gaps and significant variations in the quality of available information mean that data collection needs to be better still.

## Modelled global trend in disaster-induced displacement, 1970-2012



Source: IDMC estimates as of 22 August 2014

# Regional and national exposure and vulnerability

- Developing countries account for the vast majority of displacement caused by disasters each year - more than 85 per cent in 2013, and 97 per cent between 2008 and 2013. Those with the lowest development levels and small island developing states are particularly vulnerable and they are disproportionately represented among countries with the highest displacement figures in absolute terms or relative to their population sizes.
- Repeated events leave little time for recovery between one disaster and wave of displacement and the next.

- Eighty-eight countries experienced a number of displacement events involving more than 10,000 people over the six-year period.
- The average number of people displaced by disasters has risen over the past four decades in all regions of the world, but the trend has been most marked in Asia. More vulnerable people are exposed to hazards there today than were 40 years ago, and it is the only region whose share of global displacement has exceeded its percentage of the world's population.
- Between 2008 and 2013, 80.9 per cent of displacement took place in Asia. The region accounted for the 14 largest displacements of 2013 and the five countries with the highest displacement levels: the Philippines, China, India, Bangladesh and Vietnam.
- Given that Africa's population is growing more quickly than other regions', people's exposure to hazards and displacement risk is expected to increase faster there in the coming decades. Its population is predicted to double by 2050.
- A small number of unexpectedly extreme hazards led to high levels of displacement in the Americas between 2008 and 2013. They included hurricane Sandy, which affected the US, Cuba and other countries in 2012, and the 2010 earthquakes in Haiti and Chile.
- Pacific island countries are disproportionately affected by disasters and the displacement they cause, because when a hazard strikes it can severely affect a very high proportion of their inhabitants. This pattern is also seen in small island developing states in other regions.
- Compared with other regions, Europe experienced lower levels of displacement relative to its population size between 2008 and 2013. That said, severe floods in central Europe, particularly Germany and the Czech Republic, and in Russia and the UK, made 2013 a peak year.

## Displacement related to weather and geophysical hazards

- Weather-related hazards, particularly floods and storms, trigger most of the displacement induced by rapid-onset disasters almost every year. In 2013, such events triggered the displacement of 20.7 million people, or 94 per cent of the global total.
- Since 1970, displacement has increased with regard to both weather-related and geophysical hazards. Displacement due to weather-related hazards has increased more quickly, which corresponds to development and urban growth in areas exposed to cyclones and floods, particularly in Asia.
- Weather-related hazards are linked not only to normal variability in weather patterns, but also to long-term changes in the global climate that are expected to cause more frequent extreme weather events in the future. That said, changes in climate and weather patterns

over the next two or three decades will be relatively small compared with the normal year-to-year variability in extreme events. Near and medium-term trends in displacement associated with disasters will be driven by factors that increase the number of people who are exposed and vulnerable to hazards, more than by the hazards themselves.

- The quantification of displacement related to drought remains a global gap, which IDMC is attempting to address. We have piloted a new methodology and tool to estimate the historical displacement of pastoralists in the Horn of Africa, which could be applied to other regions and livelihoods affected by drought. Decision-makers could also use the tool to evaluate the potential effectiveness of investments under different climate and demographic scenarios.
- Unless action is taken to reduce disaster risk and to help communities adapt to changing weather patterns, we are likely to see much more displacement in the coming years and decades. Preventing and preparing for such population movements, and ensuring that lasting solutions are achieved for those who do become displaced, makes development sustainable.
- For increasing numbers of people living in areas prone to natural hazards, early warning systems and well-planned evacuations will become ever more important. Plans and measures to protect evacuees, especially the most vulnerable, should cover all phases of their displacement, until they have reintegrated safely and voluntarily in their home areas or settled in alternative locations.
- Policymakers should take care to ensure that national disaster risk reduction and climate change adaptation plans and measures incorporate the risk and impact of displacement. Many of those we analysed do not. Authorities should also ensure that their plans do not have the potential to cause displacement. They should avoid measures that arbitrarily displace people or require their permanent relocation without full respect for their human rights.

## Countries with displacement caused by both conflict and disasters

- Those undertaking humanitarian and development initiatives should address complex displacement situations in countries affected by both conflict and natural hazards in a coherent and integrated way. In 33 out of 36 countries affected by armed conflict between 2008 and 2012, there were also reports of natural hazards forcing people to flee their homes. Measures to reduce disaster and displacement risk related to natural hazards may also reduce the risk of conflict driven by insecure livelihoods.
- The combination of conflict and natural hazards creates military and environmental obstacles to population

- movements, isolating communities and limiting people's options in terms of flight and destinations. Particular attention should be paid to the protection of those who do not have the freedom to move to safer locations and who are at risk of being trapped in life-threatening situations, including those displaced to locations near to their homes.
- Many people who flee a combination of conflict and natural hazards suffer repeated displacement, including those who take refuge in areas where they are then exposed to further risk. Disaster risk reduction measures and community-based livelihood strategies are needed to enable people to adapt to new shocks, prepare for future ones and prevent repeated cycles of displacement.
- Some IDPs return home relatively quickly following a flood or other natural hazard, but others do not. People who remain displaced for prolonged periods and whose situations are unknown may be among the most vulnerable and in need of particular assistance and protection. Continued monitoring is needed to ensure that their situations are not neglected and that they are able to achieve durable solutions to their displacement.
- More comprehensive and reliable data is needed to improve knowledge of displacement dynamics when people are exposed to multiple hazards, with the aim of informing holistic responses that reflect the severity of such crises and prioritise the protection of those most in need.

#### Looking ahead

- Higher average levels of displacement are to be expected in the coming decades. As seen in past decades, demographic trends and vulnerability will continue to be the primary drivers of displacement risk, and changes in the frequency and intensity of extreme weather events are expected to add to this risk.
- The increase in the number of people exposed to hazards has outstripped authorities' ability to reduce the vulnerability of their populations, particularly in urban areas. To offset population growth, governments and their partners will need to step up efforts to reduce people's exposure and vulnerability by adopting and enforcing better land-use plans and building regulations, addressing income inequality and improving conditions for large populations living in informal settlements.
- The infrequent and random nature of the largest hazards makes annual displacement levels difficult to predict. This further highlights the need for greater investment in disaster risk reduction, climate change adaptation and preparedness measures that address people's underlying vulnerability to extreme weather patterns and the risk of major earthquake and volcano disasters.