

Implementation of the Workplan of the Task Force on Displacement under the
Warsaw International Mechanism for Loss and Damage (WIM)
United Nations Framework Convention on Climate Change (UNFCCC)

Pillar III: data and Assessment

Activities III.1-3

Systematic data collection and monitoring of displacement and its impacts at local, national, regional and international level to inform comprehensive needs and risk assessments for the formulation of policy and plans

Summary Report

Produced by IDMC on behalf of the Advisory Group CSOs

May 2018

1. Context

In order to inform recommendations to the UNFCCC Conference of the Parties on integrated approaches to address gaps and challenges, the Warsaw International Mechanism's Task Force on Displacement has identified several activities on the theme of data and assessment (work plan section III). The desired impacts of the set of activities were:

- Systematic data collection and monitoring of displacement and its impacts at local, national, regional and international level to inform comprehensive needs and risk assessments for the formulation of policy and plans, is strengthened
- The capacity to undertake systematic data collection is strengthened

Activity III.1: Providing an overview of data sources, common methodologies and good practice for displacement-related data collection and assessment, as relevant to different contexts and regions.

Activity III.2: Providing global baseline of climate-related disaster displacement risk, and package by region

Activity III.3: Analysing available data on disaster-related displacement and its impacts in different regions and groups of countries in specific circumstances (e.g. LDCs) related to sudden and slow onset events

Data-related challenges and related knowledge gaps are hindering the capacity of countries to meaningfully monitor, measure and manage risk and losses related to population displacement associated with the adverse impacts of climate change. This includes issues to do with the availability, quality and accessibility of data, the definitions and approaches behind its collection and capture, as well as the capacity - knowledge, tools and resources- to collect and analyse it. At the same time, there are good practices, developed methodologies and guidance on the collection of displacement-related data and assessments that may be drawn on and adapted to the needs of particular countries and contexts.

Such data and knowledge is necessary for the development and implementation of evidence-based policy and action to avert, minimise and address displacement. In the context of the UNFCCC system and the implementation of the Paris Agreement, this includes National Adaptation Plans, Nationally Determined

Contributions and climate financing instruments, technology transfer and capacity strengthening for countries and populations. Furthermore, displacement is an issue that cuts across other policy agendas and commitments at national to global levels. Displacement-related data and knowledge required for climate action can both draw on and contribute to progress on data and assessment issues in implementing the Sustainable Development Goals, the Sendai Framework targets on disaster risk reduction, the Global Compacts on refugees and migrants and the Agenda for Humanity, for example.

2. Methodology

The general approach for all three activities was to:

- a) Compile, summarise, build on and/or adapt for relevance already existing knowledge in the public domain from experts/bodies within and outside the UNFCCC system, including work completed under the WIM Executive Committees' initial two-year workplan
- Draw on and avoid duplication with relevant ongoing work being conducted under other policy and technical processes during the activity period (and to promote synergy and coherence between them wherever possible or relevant) including the UN Statistical Commission expert group work on both refugees and IDP statistics, EGRIS, UNISDR Words into Action Guidance development to support implementation of the Sendai Framework, SDG progress reporting and similar processes.

Scope of activities:

- **Contexts:** To include data collection and assessment in the context of different types of sudden- and (where possible) slow-onset climate-related events and processes
- **Regions:** To highlight gaps and findings specific to particular geographical regions wherever possible

The Advisory Group Civil Society Organisations (CSOs)ⁱ is a member of the Task Force on Displacement and is represented by the Internal Displacement Monitoring Center (NRC/IDMC). It is leading the implementation of these activities, in consultation with the International Organisation for Migration (IOM).

3. Summary of findings and identified gaps

3.1 Data sources, common methodologies and good practices

Estimates for displacement associated with disasters and climate extremes are best generated by event rather than by country. The only global data set on disaster displacement currently available is the one provided by IDMC, which is monitoring and collecting information for all reported disasters from governments, the UN, IFRC and national Red Cross and Red Crescent societies, NGOs and international media outlets. IDMC applies no threshold when doing so, either in terms of the number of people displaced or the distance they have travelled. Its database includes records of one up to 15 million IDPs. A single "new displacement" estimate for the total number of people displaced is generated for each event. It is important to note that this figure is not necessarily the same as the peak number of IDPs, but instead aims to provide the most comprehensive cumulative figure for those displaced with minimal double-counting.

Lessons from IDMC's work on disaster displacement data collection, collation and analysis include:

- Collecting data from a range of sources allows for triangulation, however that is not always possible. In some instances, one has to use the aggregation of a number of reports that together cover the wide geographical area affected.
- Reporting bias can be a problem, particularly when there is unequal availability of data (global reporting tends to emphasise large events in a small number of countries where international agencies, funding partners and media have a substantial presence, or where there is a strong national commitment and capacity to manage disaster risk and collect information); under-reporting of small-scale events (these are far more common, but less reported on); disasters that occur in isolated, insecure or marginalised areas also tend to be under-reported because access and communications are limited.
- "Invisible" IDPs: There tends to be significantly more information available on IDPs who take refuge at official or collective sites than on those living with host communities and in other dispersed settings. Given that in many cases the vast majority fall into the second category, figures based on data from collective sites are likely to be substantial underestimates.
- Real-time reporting is less reliable, but later assessments may underestimate: Reporting tends to be more frequent but less reliable during the most acute and highly dynamic phases of a disaster, when peak levels of displacement are likely to be reached. It becomes more accurate once there has been time to make more considered assessments. Estimates based on later evaluations of severely damaged or destroyed housing will be more reliable, but they are also likely to understate the peak level of displacement, given that they will not include people whose homes did not suffer severe damage but who fled for other reasons.

Considering the above, IDMC's estimates for some disasters are calculated by extrapolating from the number of severely damaged or destroyed homes or the number of families in evacuation centres. In both cases the housing and family data is multiplied by the average number of people per household.

Estimating average household size

Primary sources often report the number of homes rendered uninhabitable or the number of families displaced, which we convert into a figure for IDPs by multiplying the numbers by the average household size (AHS). There is, however, no universal dataset with updated and standardised AHS data for all countries.

Evacuation data

IDMC often uses data on mandatory evacuations and people staying in official evacuation centres to estimate event-based displacement. This was the case for 8.4 million of the new displacements we reported on in 2016. On the one hand, the number of people counted in evacuation centres may underestimate the total number of evacuees, as others may take refuge elsewhere. On the other, the number of people ordered to evacuate may overstate the true number, given that some are likely not to heed the order. The potential for such discrepancies is much greater when authorities advise rather than order evacuation, and as a result we do not incorporate such figures into our estimates.

Length and severity of displacement

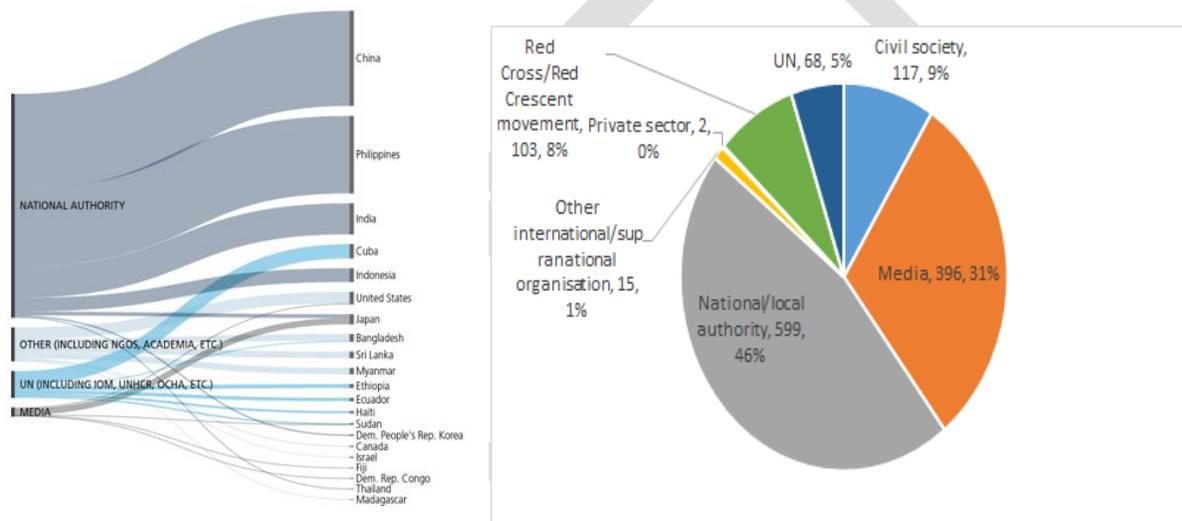
In the absence of reliable reporting on returns, local integration and relocations, it is not currently possible to clearly determine the numbers, length and severity of displacement in a globally comparable manner. In fact, of all the time-series data we have recorded on our database, in only five of the more than 130 events did collection continue until the number of displaced people reached zero. This represents a major blind spot, with significant implications for people who remain displaced but not counted, and those

responsible for protecting them. The fact that data collection ended while people were still displaced in more than 130 displacements further underscores the need for much greater investment in monitoring displacement over time in all countries.

Sources of data

IDMC does not collect primary data on internal displacement but relies on the data collected by a wide range of partners on the ground. The process of obtaining data on internal displacement remains a major challenge despite various UN General Assembly resolutions encouraging governments to collect and share their data. In the context of disasters, the majority of data sources are national and sub-national authorities, and UN agencies who collect data and report on events. However, media remains an important source of information for the triangulation of figures or also for “catching” small cases of displacements. In fact these “disasters” are not always the reported by the humanitarian community and countries have not always the capacity to collect information.

Figure 1: Sources of displacement data



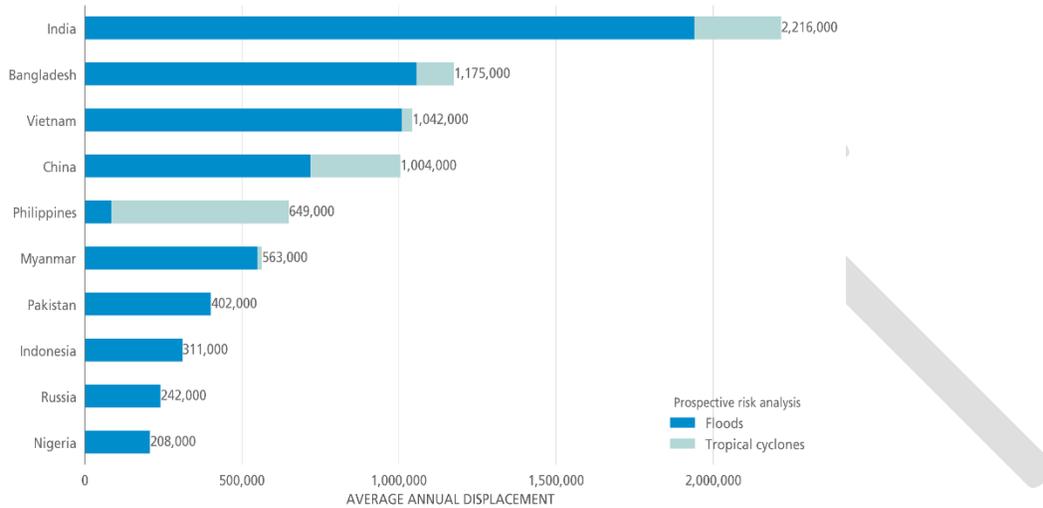
3.2. Providing a global baseline of climate related disaster displacement risk

Displacement is one of the least reported impacts of sudden-onset disasters. Often hidden behind news of pre-emptive evacuations that save lives, its costs to individuals, local communities, countries and the international community tend not to be accounted for. Neither is the risk of future displacement anchored in national and regional strategies for disaster risk reduction (DRR). The UN Office for Disaster Risk Reduction (UNISDR) has rigorously analysed the risk of economic losses due to disasters risks in its Global Assessment Report (GAR). One critical gap, however, concerns evidence and analysis of the risk of disaster-related displacement, a problem which hinders the effective reduction of both displacement and disaster risk.

Disaster risk assessments typically consider rare, high-intensity hazards that occur only once every 250, 500, 1,000 years or more. That means that most of the disasters that could take place have not yet happened. In order to account for such events, IDMC adopted a probabilistic approach to measuring risk. This is combined with empirical data on more common, low-intensity hazards for which there are recorded numbers of people displaced. The result is a unique probabilistic modelling exercise that

calculates that hydro meteorological hazards – mainly floods and cyclones (wind and storm surge) – are likely to displace (based on housing destruction) on average 12 million people each year, excluding those involved in pre-emptive evacuations.ⁱⁱ Floods account for almost three-quarters of the total modelled displacement, or an average of almost 10 million globally each year.

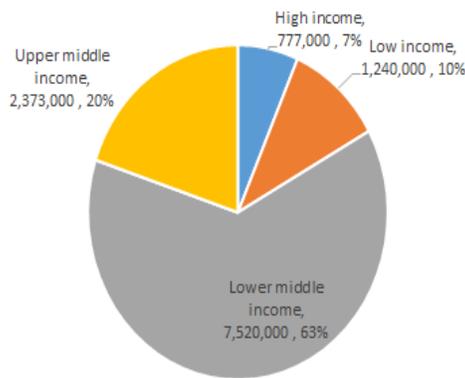
Fig 3. Absolute AAD for climate related sudden-onset disasters.



Analysis per region and Income groups (World Bank)

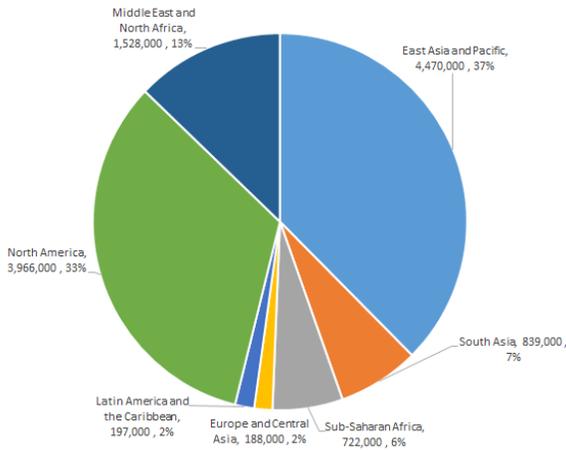
Displacement risk is higher in upper-middle and lower-middle income countries, which together account for more than 80 per cent of the modelled displacement risk.

Fig 4. AAD by Income group (World Bank)



Displacement risk is highest in the South Asia and East Asia and Pacific regions, which together account for two-thirds of the total modelled displacement risk.

Fig 5. AAD by region (World Bank)



Displacement associated with disasters will mainly affect developing countries. This represents a significant challenge for efforts to improve disaster resilience and reduce displacement risk, but it can also be interpreted as an opportunity to invest before disasters and the displacement they are likely to trigger take place. As most of the disasters that could happen have not occurred yet, prospective figures reveal an order of magnitude for future displacement in certain countries. They also show the extent to which each hazard type is likely to contribute to overall displacement risk.

Relative to population

Looking at displacement risk relative to countries' population size reveals very different but equally important information in terms of vulnerability and coping capacity. A new layer of displacement risk emerges which, as with that highlighted by our absolute figures, has significant implications for policy-makers. Figure 7 shows the 10 countries with the highest relative AAD. They are all small island developing states (SIDS), either in the Caribbean or the Pacific, and they are highly vulnerable to earthquakes and tropical cyclones. The chart highlights the fact that, despite their lower absolute risk compared with more populous countries, SIDS will experience very different and highly significant consequences in terms of displacement relative to their population size. The Bahamas, for example, can expect an annual average of 5,900 people per 100,000 inhabitants, or 5.9 per cent of its population, to be displaced by tropical cyclones.

Fig 7: AAD relative to population size (number of people displaced per 100,000 inhabitants)

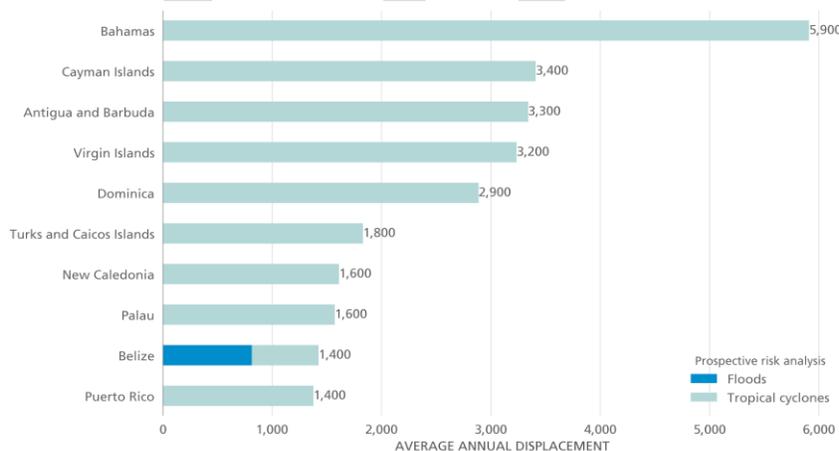
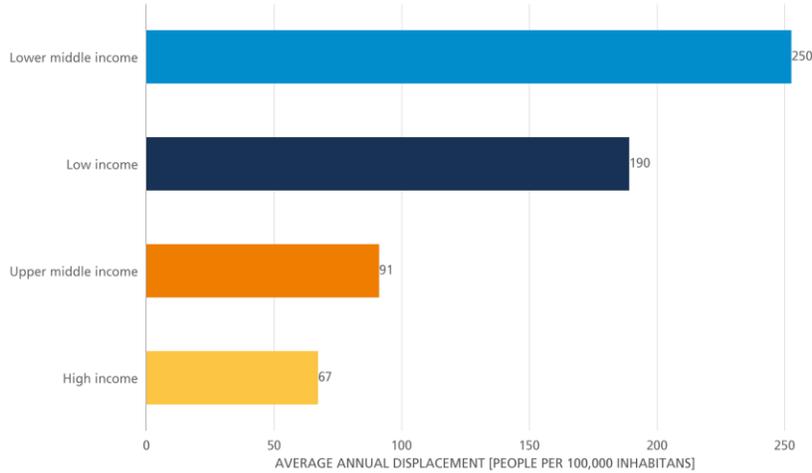


Figure 8 reveals that as with absolute AAD by income group, when measured relative to population size the lower-middle income category has the highest rate. Low income countries have a disproportionately higher rate when their population size is taken into account.

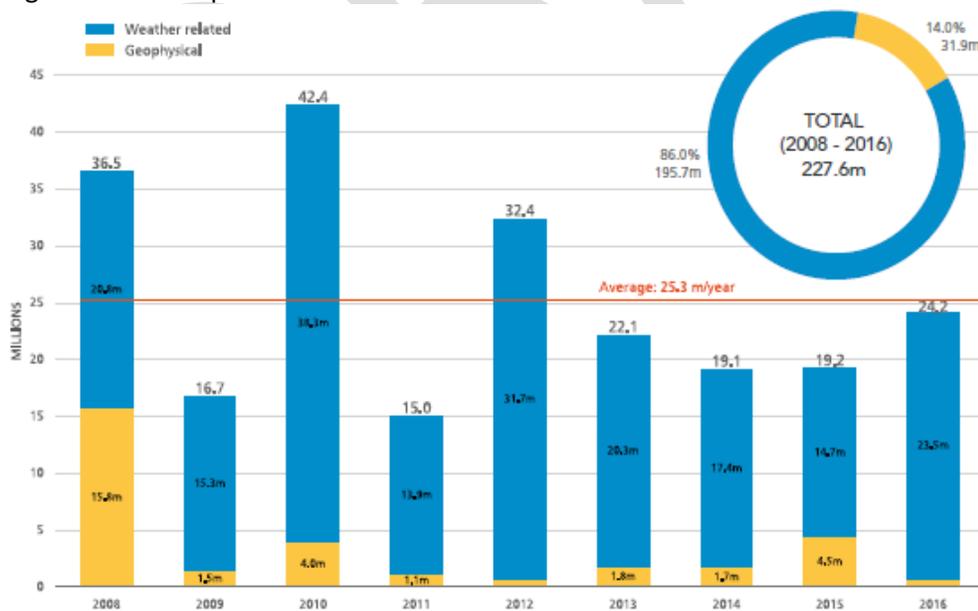
Fig 8: AAD relative to population size by income group



3.3 Analysing available data on disaster displacement and its impacts in different regions and groups of countries

Displacement associated with disasters is a global issue. There were 24.2 million new displacements brought on by sudden-onset natural hazards in 2016, and we have collected data on more than 3,800 events in more than 170 countries and territories since 2008.

Fig 1. Disaster displacement 2008-2016

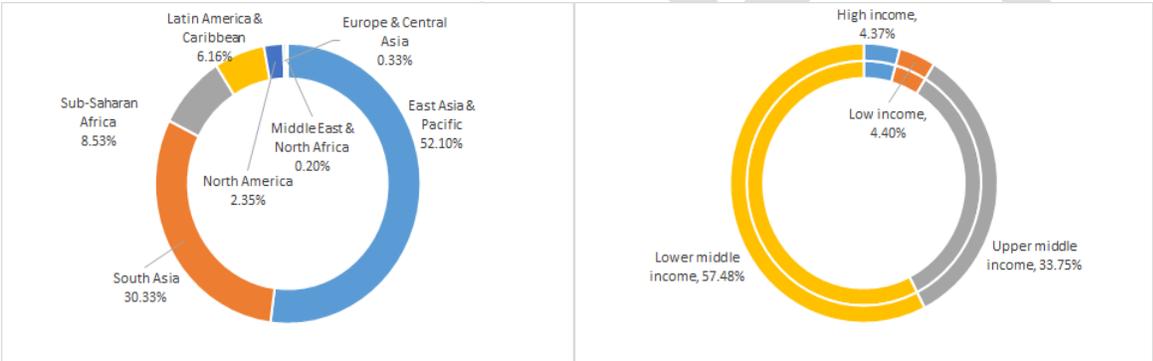


86% of internal displacement are related to weather related events accounting for a total for 195 million displacement between 2008 and 2016. Of these hydro-meteorological events, floods account for more than half of the displacements (52%), following by storms (32%).

Massive earthquakes, which can displace several million people, occur infrequently, resulting in significant annual variance in earthquake-related displacements. During the nine-year period covered by our data, we observe that earthquakes caused about 14% of the displacements. Given the nature of these figures – and owing to the fact that they were not attributed to pre-emptive mass evacuations as is sometimes the case with floods and storms – earthquake related displacements can result in prolonged displacement and increasing vulnerability for those affected. Finally, volcanic eruptions, wildfires, landslides have generated massive displacements, accounting for only 3% of the total, but representing more than 2.2 million people.

Regional overview:

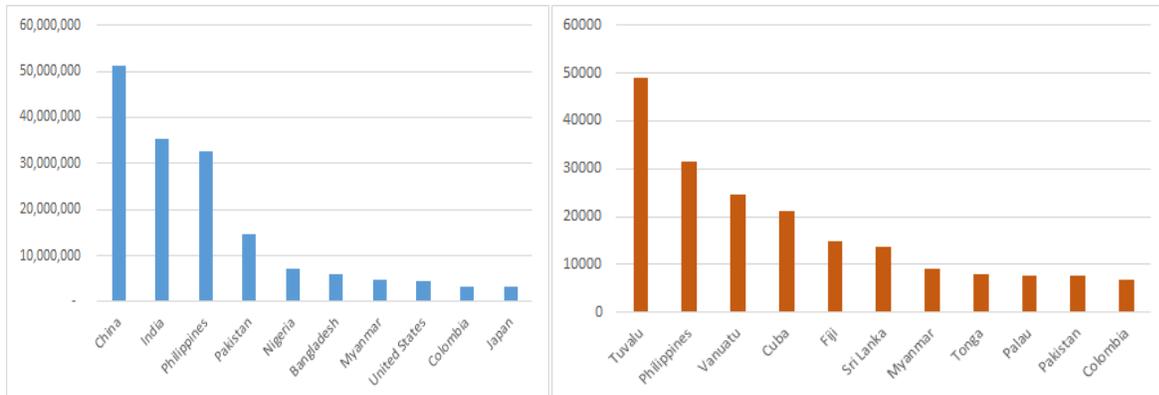
More than 82% of all new disaster displacements between 2008 and 2016 occurred in the Asia and Pacific region (East Asia and the Pacific and South Asia). During this period, IDMC recorded approximately 161 million displacements, the equivalent to the population of Bangladesh. 91% of the displacements between 2008 and 2016 occurred in lower and upper middle income.



Relative vs absolute displacements

In absolute terms, the large and populous countries of China, India and the Philippines accounted for the highest numbers of displacements. When we assess displacement in relation to the size of each country’s, however, the data tell a different story, with the several small island states at the top of the list. In the countries with the highest relative risk, we see that much of the population has been exposed and vulnerable to the same hazard event (e.g. Cyclones Pam and Winston, Hurricane Irma, the Haiti and Nepal Earthquakes).

Absolute number of new displacements - 2008-2016 and Displacement relative to population (100,000) - 2008-2016



4. Potential areas of recommendations

- Encourage and support the establishment of systematic local and national accounting for disaster displacement, building on and integrating into existing efforts in national disaster loss accounting under the Sendai Framework Monitor coordinated by UNISDR.
- Encourage and finance increased investment in assessing the duration of disaster displacement. Without time series data on displacement, planning for recovery and reconstruction as well as preventive measures and risk reduction is impossible.
- Recognise the need for a better understanding of the severity and impacts of displacement as vital for focusing attention and political will and for allocating resources where they are needed most. The current lack of understanding of the social and economic impacts of displacement in the medium and long term is an obstacle to planning and financing.
- Recognise the fact that with hydro-meteorological hazards dominating all charts, there is a strong case for more investment in early warning as floods and cyclones can be forecast and preventive and mitigating measures put in place.
- Encourage national investment in and ownership of displacement data and risk assessments in light of negotiating domestic, regional and international financing mechanisms.

ⁱ The Advisory Group Civil Society Organisations (CSOs) is composed of NRC/IDMC, the Hugo Observatory, the Arab Network for Environment and Development (RAED), Refugees International

ⁱⁱ For more information, please see <http://www.internal-displacement.org/library/publications/2017/global-disaster-displacement-risk-a-baseline-for-future-work> and <http://www.internal-displacement.org/database/global-displacement-risk-model>