

## CLIMATE CHANGE AND HUMANITARIAN ACTION

### Key messages from the Inter-Agency Standing Committee

## SETTING THE SCENE

1. Over 85 percent of disasters induced by natural hazards are climate-related. Climate change is already having humanitarian consequences today, affecting millions of people every year, and poses a major humanitarian threat for the future.

a. Since 2008, an average of 26.4 million people were displaced every year by disasters brought on by natural hazards, including climate-related events.<sup>1</sup>

b. Climate-related disasters could affect 375 million people in 2015, compared to 263 million in 2010.

2. The cost in lives, livelihoods and economic loss of climate-related disasters is considerable and could potentially rise steeply unless action is taken.

a. Between 2001 and 2010, more than 370,000 people died owing to extreme climate conditions, including heat, cold, drought, storms and floods. This marks a 20 per cent increase compared to the previous decade (1991-2000).<sup>2</sup>

b. Globally, during the decade 2001-2010, the economic loss related to hydro/meteorological events was US\$660 billion, a 54 per cent increase compared to 1991-2000.<sup>3</sup>

## CALLING FOR ACTION

3. The global community has to rapidly start reducing greenhouse gas emissions.

a. Climate change is already having a dramatic impact on humanitarian crises now. It is likely to be a driver of escalating humanitarian needs in the coming decades.

b. The global community must take ambitious action in 2015 to make commitments to reduce greenhouse gas emissions and invest more in adaptation to protect the lives and livelihoods of the most vulnerable people around the world.

c. In Paris 2015, Parties and partners of the humanitarian system must support and commit to an ambitious global climate change framework that prioritizes vulnerable people and includes a long-term vision to take urgent, effective and comprehensive action.

4. Member States and all partners in the humanitarian system need to strengthen the preventive and adaptive capacities of individuals, communities and systems for climate resilience.

a. *Shifting from crisis response to crisis risk management.* We must focus more on prevention and preparedness, so that losses and the need for humanitarian interventions are minimized when disasters strike. We need to ensure that emergency response is designed and resourced to include the protection and enhancement of community resilience and preventive and adaptive capacity to climate change impacts.

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<sup>1</sup> Global Estimates 2015: People displaced by disasters", Norwegian Refugee Council / Internal Displacement Monitoring Centre (2015)

<sup>2</sup> The Global Climate 2001–2010, A Decade of Climate Extremes, WMO (2013)

<sup>3</sup> The Global Climate 2001–2010, A Decade of Climate Extremes, WMO (2013)

b. *Managing known risks better and together.* We need to minimize risks by focusing risk reduction including preparedness interventions on those countries and places known to be at highest risk of climate-related disasters, and to support and empower the most vulnerable people, who bear the brunt of climate-related disasters, including through the implementation of the 2015 Sendai Framework for Disaster Risk Reduction. Investing now in emergency preparedness will not only protect vulnerable populations from the impacts of climate change, but it will also reduce the costs and future carbon emissions associated with humanitarian action, while speeding delivery in the event of a crisis.<sup>4</sup>

c. *Moving towards more flexible funding arrangements.* Less than 0.5 per cent of all international aid is spent on disaster prevention and preparedness.<sup>5</sup> Funds also need to be better targeted to build the resilience of those countries and people most vulnerable to climate-related disasters. Investment in climate resilience is cost effective. Yearly potential benefits from upgrading weather and climate early warning systems include saving an average of 23,000 lives, safeguarding agricultural livelihoods of nearly 2.5 billion people<sup>6</sup>, avoiding up to US\$2 billion in asset losses, and generating up to US\$30 billion in increased productivity. This can be achieved through minimal and well-targeted investments, reflecting benefit-cost ratios between 4 and 36.<sup>7</sup>

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<sup>4</sup> Early investment in climate preparedness would allow humanitarian actors to pre-position emergency supplies in high-risk contexts through less carbon intensive transport methods. By shipping and storing critical supplies in climate hot-spots in advance of a crisis, aid workers can drastically reduce air-freight emissions in future emergencies. Overseas shipping expends just 1% of the emissions that an international freight flight would per tonne per kilometre. (UK-DEFRA/DECC Greenhouse Gas Conversion Factor Repository, 2015 v. 2, Scope 3 freighting data. Flight data includes radiant forcing factors.)

Emergency preparedness has also been proven to save time and money toward future crises. A joint UNICEF/WFP research project in early 2015 demonstrated that for every \$1 spent toward preparedness in high risk contexts, more than \$2 are saved on average in future humanitarian action. In addition, these investments speed humanitarian operations by more than one week on average -- meaning that more people in need are reached, faster. (UNICEF/WFP Return on Investment for Emergency Preparedness, Boston Consulting Group, 2015)

<sup>5</sup> Financing Disaster Risk Reduction. A 20 year story of international aid. ODI (2013)

<sup>6</sup> Resilient livelihoods: Disaster risk reduction for food and nutrition security. (FAO 2013)

<sup>7</sup> A Cost Effective Solution to Reduce Disaster Losses in Developing Countries, Stéphane Hallegatte, The World Bank (2012)

## Annex: Supporting Information

### Climate related risks on the rise

The average number of disasters recorded each year in the global Emergency Events Database (EM-DAT) has doubled, from 200 twenty years ago to around 400 in the past decade. Today, three quarters of all disasters are now climate related, compared with half a decade ago. (CRED 2014).

Surface temperature is projected to rise over the 21<sup>st</sup> century under all assessed emission scenarios. It is very likely that heat waves will occur more often and last longer, and that extreme precipitation events will become more intense and frequent in many regions. The ocean will continue to warm and acidify, and global mean sea level will continue to rise. (IPCC, 2014)

Nearly 1.4 billion people live on less than US\$1.25 a day. Seventy per cent of these people live in rural areas where they depend on agriculture and are highly prone to climate disasters, food insecurity and malnutrition.<sup>8</sup> Nearly 634 million people – one tenth of the global population – live in at-risk coastal areas just a few meters above existing sea levels. Three quarters are located in Asian flood-prone densely populated river deltas or in low-lying small island states.<sup>9</sup>

The world's 136 largest cities could be facing annual flood losses of US\$1 trillion by 2050.<sup>10</sup>

In urban areas, climate change is projected to increase risks for people's health, livelihoods, assets, economies and ecosystems, including risks from heat stress, storms and extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, sea-level rise, and storm surges (very high confidence). These risks are amplified for those lacking essential infrastructure and services or living in exposed areas. (IPCC, 2014)

Climate change can indirectly increase risks of violent conflict by amplifying well-documented drivers of these conflicts, such as poverty and economic shocks (medium confidence). (IPCC, 2014)

### Displacement

Climate change is a driver of human mobility and is expected to increase the displacement of populations. Policy makers have to ensure that adaptation measures are taken to prevent and mitigate displacement in the context of climate change, including through managed migration as an adaptation strategy and planned relocation as an adaptation measure of last resort. (Recommendations from the Advisory Group on Climate Change and Human Mobility, COP 20, Lima Peru)

Populations that experience higher exposure to extreme weather events, particularly in developing countries with low income often, lack the resources for planned and managed migration. (IPCC 2014)

Today, the likelihood of being displaced by a disaster is 60 per cent higher than it was four decades ago and disaster related displacement can last for up to 26 years (IDMC, 2015)

### Mortality and health

Between 2030 and 2050, climate change is expected to cause approximately 250 000 additional deaths per year, from malnutrition, malaria, diarrhea and heat stress. (WHO, 2014)

The number of people affected by climate-related diseases is expected to increase, for example, malnutrition can lead to life-threatening diseases, such as pneumonia and measles, and more deaths particularly among children.

Climate change threatens to widen health inequalities, particularly between the richest and poorest populations. Poorer populations and children are disproportionately at risk of the effects of climate change, with different impacts on women and men. In poorer settings where health systems are weaker and baseline health status is already worse, the effects of disruption to basic health services from extreme events are even more severe. (WHO, 2014) Strong and effective action to limit climate change and avoid unacceptable risks to public health is required (WHO, 2015).<sup>11</sup>

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<sup>8</sup> World Bank, 2008.

<sup>9</sup> IHED, 2006/7

<sup>10</sup> World Bank, 2013

<sup>11</sup> <http://www.who.int/globalchange/global-campaign/en/>

## Water and Food

By 2030, the world is projected to face a 40 per cent global water deficit under the business-as-usual climate scenario. (2030 WRG, 2009). Current projections show that freshwater-related risks increase significantly with increasing greenhouse gas emissions. The latter are leading to an exacerbated competition for water among all uses and users, affecting regional water, energy and food securities. (IPCC, 2014)

Between 2003 and 2013, damage and losses caused by large scale disasters due to natural hazards accounted for 22 per cent of total damage and losses for the agriculture sector alone (including crop, livestock, fishery and forestry sub-sectors). When considering only climate-related disasters, the agriculture sector absorbs 25 per cent of the total damage and losses. (FAO, 2015)<sup>12</sup>

Climate change could reduce potential agricultural output by up to 30 per cent in Africa and up to 21 per cent in Asia. (FAO, 2010)

More than 80 percent of the world's food insecure people live in countries that are prone to natural hazards and are characterized by land and ecosystem degradation, amplifying the impacts of these disasters. (EM-DAT, 2014). According to the IPCC report, among the most significant impacts of climate change is the risk to hunger and child malnutrition, which could increase by up to 20 percent by 2050<sup>13</sup>.

## Economic Losses

Economic losses due to climate-related disasters now regularly exceed \$100 billion annually and are projected to double by 2030. Since 1980, risk of economic loss due to floods has increased by over 160 per cent and to tropical cyclones by 265 per cent in OECD countries. In fact, risk of economic loss due to floods and cyclones in the OECD is growing faster than GDP per capita. (ISDR, 2013)

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<sup>12</sup> In recent years, there has been evidence that climate change is affecting animal and plant pests and diseases, meaning that food chain crises are augmenting in frequency and intensity, simultaneously augmenting risks for human health and food security. Food Chain Crises are caused by transboundary and zoonotic animal diseases, transboundary plant pests, and food safety threats, which have high impact on crop and animal production, food safety, and on the livelihoods, health and food security of people. (FAO, 2015)

<sup>13</sup> IPCC, 2014