

# Climate Change Conference

COP16 Cancún |

29 November – 10 December 2010 |

advocacy toolkit

 International Federation  
of Red Cross and Red Crescent Societies

## Climate change facts and figures

### Overall situation

- Climate change is increasing the risk of extreme weather events with more intense hurricanes, cyclones and typhoons, heavier rain and snowfall, more frequent and intense heat waves, and longer droughts. These lead to more disasters and have dramatic impacts on food security.
- In the past 100 years, the global average temperature has risen by about 0.74 degrees celsius.
- The rate of temperature increase accelerated over the course of the 20<sup>th</sup> century. There have been 14 of the hottest years on record in the last 16 years.

Projections in temperature rise for the 21<sup>st</sup> century range from 2 to 4 degrees celsius, which would have catastrophic consequences. According to an Intergovernmental Panel on Climate Change (IPCC) report, island states such as the Maldives will suffer major storm surges and rising sea level could cause many of the islands to disappear. This poses a tremendous threat to the lives, property and livelihoods of people living there. Millions more people could experience coastal flooding each year. Some kinds of food productivity will decrease in low latitudes and rise in mid to high latitudes. Ecosystems will change. Growing numbers of people in the poorest countries will suffer from malnutrition and from diarrhoeal, cardio-respiratory and infectious diseases. Globally, up to 30 per cent of species will be at increasing risk of extinction.

- It is very likely that the emission of greenhouse gases is the main cause of this temperature rise. Greenhouse gases are increasing due to the burning of fossil fuels including coal, gas and oil, changes in land use and deforestation.
- All over the world, glaciers are melting at a very fast rate. On average, glaciers have thinned by over 10 metres since 1980.
- Changing rainfall patterns and the melting of glaciers will jeopardize water supplies to hundreds of millions of people.
- It is projected that sea level will rise anywhere between 20 and 90cm globally by the end of this century.
- In summer 2009, the minimum level of ice cover in the Arctic was 24 per cent below the 1979–2000 average. Scientists expect the melting to continue in coming decades.
- Today the concentration of CO<sub>2</sub> is 380 ppm (parts per million). This is a very sharp increase from the pre-industrial level value of about 280 ppm. It also far exceeds the natural range over the past

650,000 years (180 to 300 ppm). There has been a clear correlation between the highest concentrations of CO<sub>2</sub> and the warmest climate.

## ***Climate-related and natural disasters in 2009***

- There were 351 natural disasters and 325 of these were climate-related.
- Natural disasters killed 10,551 people; of these 8,700 died as a result of climate-related disasters.
- Of the 142 million people affected by natural disasters, 139 million were affected by climate-related disasters.
- Floods affected the greatest number of people (57 million) and climate-related disasters accounted for 86 per cent of reported damages.
- The amount of money required to deal with climate-related disasters from IFRC's Disasters Relief Emergency Fund (DREF) was 9.5 million Swiss francs.
- Climate-related disasters account for 55 per cent of IFRC emergency grants.

## ***A pattern of substantially higher numbers of natural disasters and, in particular, climate-related disasters***

- 1990–1999: around 200 climate-related disasters per year.
- 1999–2009: 350 climate-related disasters on average per year.
- 2000–2009: 55 million people affected on average by climate-related disasters annually.
- 2000–2009: 789 billion US dollars estimated damage as a result of climate-related disasters.

For detailed statistics on people displaced due to climate-related disasters please visit <http://bit.ly/txbLM> by the United Nations Office for the Coordination of Humanitarian Affairs and the Internal Displacement Monitoring Centre

[Sources: IFRC and CRED, Oxfam, Care. Figures apply to 2009 unless otherwise stated.]