

# Children and Climate Change

Policy brief

Every year, around 250,000 children die before their fifth birthday as a result of climate change. Changing weather patterns are increasing malnutrition and the spread of disease, and making natural disasters more frequent and intense. Climate change is also driving increased displacement, migration and urbanisation, all of which push more children into poverty and put them at greater risk. To combat these trends, the international community must significantly reduce greenhouse gas emissions so they start to fall before 2020. Developed countries should also provide developing countries with enough funding to help them adapt to climate change and address their people's most urgent needs.

#### Why is the climate changing?

Greenhouse gases, such as carbon dioxide, emitted into the atmosphere since the Industrial Revolution, have caused global average temperatures to rise by 0.76°C.<sup>2</sup> This is already affecting the Earth's weather patterns, making floods, droughts and storms more frequent and intense. Ecosystems are changing and sea levels rising. So far, 325 million people are being seriously affected by climate change.<sup>3</sup>

Further temperature increases are inevitable because of gases already emitted into the atmosphere. Without urgent action, global temperatures are likely to exceed the threshold of 2°C above pre-industrial levels, beyond which climate change could become catastrophic.<sup>4</sup> Such a rise will be felt unevenly around the world, but would undoubtedly have a devastating effect on many of the world's poorest communities.

The concentration of greenhouse gases in the atmosphere has already increased from about 275 parts per million (ppm) of carbon dioxide before the Industrial Revolution to the equivalent of 420 ppm by 2008. While the first half of this increase took about 200 years, the second half took only 30 years. This is because greenhouse gas emissions increased dramatically throughout the 20<sup>th</sup> century.

As a conservative estimate, we must stabilise greenhouse gas levels below the equivalent of 450 ppm of carbon dioxide in the atmosphere to stand even a 50% chance of keeping global temperature rises below 2°C.<sup>7</sup> For the world to have even a 50/50 chance of avoiding catastrophic climate change, global emissions must start to fall before 2020.

#### How does climate change affect children?

The world's poorest people are already suffering the worst effects of climate change. It is preventing them from accessing clean water, making their farming less productive and increasing the spread of diseases. Poor people are the most likely to live in places prone to natural disasters and the least likely to be able to adapt to new environmental dangers.

Nearly 9 million children under the age of five die every year. Most of them die from a small number of neonatal conditions and preventable illnesses. The illnesses that kill the most children – including diarrhoea, malaria and malnutrition – are highly sensitive to climatic conditions, such as flooding and higher temperatures.

Because it reduces people's access to clean water, climate change increases water-borne illnesses such as diarrhoea and cholera. Vector-borne diseases, such as malaria, become more prevalent as mosquitoes move into new areas as temperatures rise. Malnutrition currently contributes to the deaths of 3.2 million children every year. This death toll will increase as crop yields fall and food prices fluctuate.

During natural disasters, children are the most vulnerable people of all. Climate-related disasters, such as floods and cyclones, have already doubled from around 200 per year in the 1980s to 400 per year today, putting many more children's lives at risk. Within the next decade, Save the Children estimates that as many as 175 million children will be affected by natural disasters every year. 9

Children will also be increasingly affected by the interaction of climate change with large-scale global trends. Natural disasters or food and water shortages caused by climate change could force up to 100 million children to be displaced from their homes by 2050. Many of them will move into cities. Half the world's population – 3.3 billion people – already live in urban areas, and 800 million of them have to live without adequate sanitation. As climate change hastens the process of urbanisation, the poorest people will become even more vulnerable to diseases, and children most of all.

### What should the international community do?

The threat posed by climate change must be tackled in two ways: by quickly reducing global greenhouse gas emissions to prevent temperature rises above 2°C, and by developed countries helping developing countries to adapt to the effects of climate changes.

Limiting global warming will only be achieved through rapid and substantial cuts in greenhouse gas emissions. Historically, developed countries have emitted the most greenhouse gases and are responsible for the majority of today's emissions. They must therefore make the fastest and most dramatic cuts, reducing their emissions by 40%, based on 1990 levels, by 2020.

Because emerging and developing countries are less responsible for climate change, they should be allowed a limited amount of 'carbon head-room' to help their economies grow before they, too, must make considerable reductions. By 2050, all countries must agree to cut global emissions by at least 80%, based on 1990 levels.

Meanwhile, developing countries should continue to create National Adaptation Programmes of Action (NAPAs) to protect their people against the effects of climate change. These strategies should include strengthening ill-equipped and under-staffed health systems so they can cope with increasing diseases and undernutrition.

Adaptation should also include the implementation of early warning systems against natural disasters, famines and epidemics. Strategies for reducing the risk of disasters should be drawn up, putting children's needs first and allowing them to participate in the process. In addition, communities should be equipped with essential resources to allow them to cope with climate change, through cash transfers. Developed countries must provide the funding required to support these strategies – at least \$100 billion per year by 2020. Developed countries should also provide at least \$10 billion per year in 'fast-start' funding between 2010 and 2013. This should be spent on meeting immediate needs in the poorest countries. It should also be used to implement NAPAs already drafted by developing countries, but that are not currently funded. Fast-start funding would also prepare the ground for future adaptation funding increases. Finally, all climate adaptation funding, fast-start or otherwise, must be separate from the 0.7% of Gross Domestic Product (GDP) in official development assistance (ODA) that developed countries should already be providing.

Imposing an international levy on 'bunker fuels' would raise significant additional funding for climate change adaptation. These fuels, used in international aviation and shipping, contribute significantly to greenhouse gas emissions but currently remain outside individual countries' emission-reduction targets. A 'transaction tax' on international financial transactions would also raise significant, predictable funds for climate change adaptation and poverty alleviation. Implementing an effective international carbon trading market could also help reduce emissions and raise more revenue.

Finally, funds raised for climate action in developing countries must be allocated quickly and transparently to the people who need it most. The United Nations Framework Convention on Climate Change (UNFCCC) must implement efficient and fair funding disbursal mechanisms to allow poor communities to cope with climate change effectively.

## What we are calling for

The international community should sign a binding treaty to cut dramatically international greenhouse emissions and provide the poorest countries with enough funding to adapt to the effects of climate change. In particular:

- Developed countries should cut their emissions by 40% on 1990 levels by 2020.
- Total global emissions should be reduced by at least 80% on 1990 levels by 2050, mostly in developed countries. Emerging economies should also agree emissions targets to meet this goal.
- Developed countries should contribute at least \$100 billion per year for climate adaptation in developing countries by 2020, in addition to ODA.
- Developed countries should contribute at least \$10 billion per year for fast-start funding between 2010 and 2013, in addition to ODA.
- Adaptation funds should be disbursed efficiently, fairly and transparently.
- Developing countries should draw up comprehensive NAPAs to help those most in need, including strengthening health, water and sanitation services and providing cash grants for the most vulnerable people.
- Developing countries should focus on children's particular needs when designing adaptation plans.
- The international community should impose a levy on fuel used by international aviation and shipping (bunker fuels) to fund climate action.
- The international community should impose a 'transaction tax' of 0.05% on international currency exchanges, derivatives and share transactions to create a predictable source of funding to address climate change and poverty.

#### References

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>10</sup> Stern, Nicholas (2006) 'The Economics of Climate Change: The Stern Review'

<sup>11</sup> UN Habitat (2003) 'Water and Sanitation in the World's Cities: Local action for global goals' <sup>12</sup> Spratt, Stephen (2009) 'Assessing the Alternatives, Financing climate change mitigation and adaptation in developing countries'; \$100 billion per year is suggested as the amount potentially required to allow developing countries to adapt to climate change. Subsequent estimates have been considerably higher; see for example Parry et al (2009) 'Assessing the costs of adaptation to climate change'.

European Commission (2009) 'A European blueprint for the Copenhagen deal'. The EU has suggested a 'fast track' investment of €5-7 billion per year, which equates to approximately US\$10 billion per year.

<sup>&</sup>lt;sup>1</sup> In 2009, the Global Humanitarian Forum estimated that 300,000 people are dying every year from increased malnutrition and disease caused by climate change. Save the Children estimates 80-90% of these deaths to be among children under five.

<sup>&</sup>lt;sup>2</sup> Intergovernmental Panel on Climate Change (2007) Fourth Assessment Report

<sup>&</sup>lt;sup>5</sup> Spratt, Stephen (2009) 'Assessing the Alternatives: Financing climate change mitigation and adaptation in developing countries'

<sup>&</sup>lt;sup>6</sup> Forster et al. (2007) 'Changes in Atmospheric Constituents and in Radiative Forcing' in IPCC (2007) Fourth Assessment Report

<sup>&</sup>lt;sup>7</sup> IPCC (2007) Fourth Assessment Report; subsequent studies have suggested considerably lower stabilisation levels will be required to avoid a 2°C rise.

<sup>&</sup>lt;sup>8</sup> The International Disaster Database – Centre for Research on the Epidemiology of Disasters; www.emdat.be

<sup>9</sup> Save the Children (2007) 'Legacy of Disasters'