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Climate, Poverty, and Justice

What the Poznań UN climate conference needs to deliver for a fair and effective global climate regime

Climate change is the number one threat to human development. Yet progress towards limiting global warming to below 2°C has not been sufficient.

The global effort required to reduce emissions and support the poorest and most vulnerable people to adapt to unavoidable changes must be based on objective indicators of countries' historic responsibilities for causing the crisis, and their capabilities to confront it.

The Poznań climate talks must mark a turning point in international negotiations, switching from analysis and discussion to full negotiation mode. For the sake of people and the planet there is no more time to lose.

Summary

For the poorest and most vulnerable people in today's world, climate change is a 'triple whammy': they didn't cause it, they are most affected by it, and they are least able to afford even simple measures that could help protect them from those damaging impacts that are already unavoidable.

Increased floods and droughts, rising sea levels, changing patterns of rainfall, and falling crop yields are just some of the extra challenges hitting poor people across the developing world. But much worse is to come unless a bold and comprehensive global political deal is done to fight climate change *and* consign poverty to the history books. Today, climate change is the number one threat to human development. For many, it is already a life or death issue.

Poznań must agree the key elements of a deal

As governments convene for the next round of UN talks in Poznań, Poland, time is running out. Poznań must mark a major step forward and build on the consensus achieved in Bali a year ago. Negotiators must narrow the focus of talks but also ensure that key elements for a fair and adequate deal remain on the table, so that a deal can be sealed at the concluding talks in Copenhagen in December 2009. For generations ahead – and for millions of the poorest people now and in future – Copenhagen must be remembered as a turning point, the date when the world chose to halt runaway climate change and create the conditions for low-carbon, climate-resilient development for all.

If governments in Poznań fail to energise the negotiations, they will effectively undermine poor people's basic rights on a massive scale. They will be responsible for exacerbating climate change, increasing poverty, and so halting and then reversing human development.

Global warming: impacts on the poorest people

Global warming has already reached 0.8°C over pre-industrial levels. To avoid catastrophic and irreversible climate impacts, global warming must remain well below 2°C. While the physical response of the Earth's systems to ongoing greenhouse-gas emissions is non-negotiable, the level of risk we will all face in years to come is the most critical element of current UN negotiations. Inaction or low ambition means increased risks, faced by poor people first and worst. There is a window of opportunity in which to cut emissions and minimise catastrophic risks, but it is closing fast.

Even below 2°C, there will be major, often devastating impacts, on the lives of the poorest people, and on poorer countries. As an example, with this level of warming, as many as 1.8 billion people will be affected by water stress due to shrinking water availability. But if emissions are not cut and temperatures rise beyond the 2°C limit, then the world will face catastrophic consequences, dashing any near-term prospect of overcoming poverty. If global temperatures rise to 3°C, up to 600 million more people will face the risk of hunger, and water shortages could affect up to 4 billion people. Worse scenarios arise if temperatures rise beyond 4°C: 300 million facing coastal flooding; many island nations doomed; 1.5–2.5 billion people exposed to dengue fever; and a 50 per cent decrease in water availability from South Africa to Latin America to the Mediterranean.

Can a deal be done?

The challenge is clear. But will the world's governments meet it? Poznań must lay the groundwork. As a top-line goal it must:

Agree to negotiate a treaty that keeps global average temperature increases well below 2°C. This must include a clear timeline and commitments for reducing global emissions – they must peak in 2015 at the latest and be cut by at least 80 per cent below 1990 levels by 2050.

A deal hinges on political will, international co-operation, and confidence in the multilateral system. Some richer countries such as Germany and the UK are, today, at least on track to meet their Kyoto commitments, while others – such as Spain, Italy, and Canada are still far off track. In a dramatic departure from current US policy, President-elect Barack Obama has expressed support for immediate steps and for the USA to reduce emissions by 80 per cent by 2050 (below 1990 levels). If all rich countries can similarly renew their commitment and demonstrate a will to act in the near term, a deal can be done.

But it is not only about political will – the potential costs of moving to low-carbon development pathways, and of adapting to unavoidable climate impacts, are also a factor. At 1–1.6 per cent of global economic product, however, meeting these costs is an attainable goal. What's more, all countries can benefit from a deal: low-carbon, climate-resilient development means less pollution and cleaner air, lower health-care bills, more jobs in new industries, and lower energy bills. Governments have shown they can rally both political will and vast sums of money in the face of economic and financial crises. They can and must do the same in the face of the existential threat that is climate change.

Last but not least, getting to a deal is also about making it a fair deal. Poorer countries cannot be expected to pay the price for the richer countries' industrial development.

Who pays and what's fair?: responsibility and capability

The data on cumulative CO₂ emissions per head demonstrate that rich countries are most responsible for climate change. As a result of their fossil-fuel-dependent growth paths, the advanced economies also have levels of income and wealth that enable them to act.

Rich countries have the biggest responsibility as well as the greatest capability to pay towards the global mitigation and adaptation action required. If they only focus on their own cuts in emissions, they will put a huge and unfair burden on developing countries. They must take on their fair shares of the global burden. This means, for instance, that the EU must go substantially beyond the intermediate target of a 25–40 per cent cut in emissions by 2020 if developing countries are not to shoulder the burden of a 15–30 per cent cut in emissions on their own.

At the same time, since the Kyoto Protocol was originally signed, some advanced developing countries have now reached higher levels of emissions and income per head than some industrialised countries bound by the Protocol. Ultimately, all countries will be expected to contribute to the global mitigation effort in some way, and those with especially high per-capita emissions and income sooner rather than later. But the rich advanced countries must now take the lead – they caused the lion's share of the problem and must pay for the lion's share of its solution.

Mitigation: cutting emissions under a fair deal

Developing countries cannot be expected to negotiate the same type or level of contributions as advanced countries. Not when richer countries have failed to deliver on past promises to provide finance and technology for adaptation – and not when promises on aid, trade, and the food crisis remain unfulfilled. In this light, rich-country demands for comparable commitments by developing countries in the run-up to Copenhagen are highly inappropriate – and unproductive.

Any framework deal must recognise the challenges facing developing countries. A trust-building approach to tackling climate change means that developing countries should be rewarded for reducing emissions but not penalised for failing to do so. For the least-developed and most vulnerable countries, adaptation and development must remain their top priorities. More advanced developing countries should contribute to the global mitigation effort according to their national circumstances and in ways that maximise poverty reduction and sustainable development.

Richer countries must enable developing countries' mitigation efforts by contributing finance, technology, and capacity-building. This is not aid; rather it is part of rich countries' fair share of the global mitigation effort. These finance transfers must be additional to development-aid commitments.

Adaptation is needed *now*

Damaging climate impacts on the poorest and most vulnerable people are already apparent in many developing countries, and will get worse as global temperatures rise. This is true even if average temperature remains, as it must, below a 2°C increase.

Poorer countries and regions urgently need adaptation support. This can involve a wide range of actions and investments, including for drought- or flood-tolerant crops, and training or equipment for rainwater harvesting. It can also mean building higher roads and bridges in flood-prone areas, or modifying building design in areas increasingly struck by hurricanes.

A Copenhagen deal must include a comprehensive framework that enables a massive scale-up of adaptation strategies in developing countries – fully aligned with long-term development planning. The strategies must involve transparent and inclusive consultation and implementation processes, including among other stakeholders, local communities, women representatives, indigenous peoples, and NGOs.

Oxfam estimates that at least \$50bn annually is needed to support adaptation in developing countries. The developed countries must provide these resources as compensatory payments – not as loans – to address the costs of past pollution.

Poznań must face these challenges and succeed in agreeing in principle the key elements of a comprehensive deal at Copenhagen. It must set the stage for a final, successful deal in a year's time. The world's poorest millions – and billions – of people deserve no less.

1 Introduction: why Poznań matters

When the rain comes, the flood comes. One can see how the water has washed away the soil. Then the soil became poor and the people cannot grow vegetables or crops. So the people, they cannot eat very well.

Mulualem Birhane, Dembecha, Ethiopia

Climate change: still the number one threat to human development

Mulualem Birhane, a farmer in Dembecha in Ethiopia, depends like almost all farmers in Ethiopia on rainfall for growing his crops. In the past, there was a rainy season once a year, but nowadays rainfall patterns have become increasingly unreliable – and rains now often come in downpours, causing flooding and erosion. This makes it difficult to grow sufficient crops to sustain the livelihoods of the farmers – and in some cases becomes catastrophic: in 2006, hundreds of thousands of Ethiopians lost their homes in the worst flooding in decades.

Many of the poorest and most vulnerable people across the developing world are already living with dangerous climate change. To the extent that current and growing impacts for people such as Mulualem Birhane are driven by climate change, they represent a violation of their basic rights, such as their right to development or their right to food.¹ Some African countries could see agricultural yields decrease by 50 per cent by 2050 and crop net revenues could fall by as much as 90 per cent by 2100.²

At the same time, millions of poor people around the world are also being affected by recent spikes in food and oil prices. Grain-price rises cost developing economies \$324bn last year – more than three times what they received in aid.³ The World Bank estimates that the food crisis could push 100 million people into poverty.⁴ Food and oil prices have fallen in recent months, but food remains 51 per cent more expensive than it was two years ago.⁵ While action to buffer poor people from these forces is still far from adequate, they will also likely bear the brunt of hardships caused by financial market failures.

In the midst of this ‘perfect storm’, poor people also are facing the fact that the impacts of climate change are here to stay – and will intensify. Present and future impacts of global warming are set to threaten the lives and livelihoods of millions – if not billions – of people. Although the climate challenge may not always seem as immediate a threat as the myriad crises now unfolding, it is every bit as pressing and still remains the number one threat to human development in the long term.

Climate impacts will first halt, and then reverse human development.⁶ The poorest, most vulnerable people are being affected directly – first and worst – despite being least responsible for the crisis. A retreat by world leaders into divisive, dangerous, and unsustainable political and economic isolationism will only contribute to this scenario, undermining poor people’s basic rights on a mass scale. Alternatively, governments can choose bold action to create a new global politics to manage the economy,

fight climate change, invest in agriculture and food security, and consign poverty to the history books.

As part of this alternative scenario, urgent steps to enable the poorest people to adapt to a changing climate must become a priority for international action. Global warming must be limited to levels where human development and mass poverty reduction can remain a viable goal. While all climate change is dangerous, scientists agree that warming beyond 2°C would lead to globally catastrophic and often irreversible consequences for almost all ecosystems and all human societies (see Table 1).⁷ Receiving additional adaptation support may become a matter of life and death for people like Muluaem Birhane, and keeping warming below 2°C will have the same urgency for his children and grandchildren.

Table 1: Selected poverty implications corresponding to different global target ranges under discussion in the ‘Shared Vision’ workshop in Poznań

Global target	Selected poverty implications
2°C	Decline in crop yield in much of Africa, and in other tropical regions. Up to 200 million more people at risk of hunger.
At least 80 per cent global emissions cut by 2050, from 1990 levels	40–60 million more people exposed to malaria in Africa. At least 300,000 people die each year as a result of climate change, including from diseases, such as diarrhoea, malaria, and malnutrition.
350–400 ppm CO ₂ -equivalent*	Potentially 20–30 per cent decrease in water availability in some vulnerable regions, e.g. Southern Africa and Mediterranean. Up to 1.8 billion more people affected by water stress, including up to 250 million Africans, and 50 million people in the Andean region as glaciers shrink. Altered monsoon patterns in Asia lead to increased flooding, affecting hundreds of millions of people. Sea-level rise threatens existence of small-island states. Up to 10 million additional people affected by coastal flooding each year. Warming likely to destabilise Greenland and West Antarctic ice sheets, triggering a sea-level rise of several metres. Climate-change impacts contribute to large displacements of people. 50 million environmental refugees by 2010. 15–40 per cent of land animal and plant species facing extinction.
3°C	Severe decline in agricultural yields, e.g. up to 30 per cent lower yields for rice or wheat in India. Up to 600 million more people at risk of hunger, over half of them in Africa and western Asia. Globally, hunger and malnutrition attributable to climate change might kill 1–3 million more people per year.
400–500 ppm CO ₂ -equivalent	All-year-round droughts in much of Southern Africa. Disappearance of glaciers in South America and Asia, affecting water supply. Water shortages affecting up to 4 billion additional people. Serious droughts in Europe every ten years instead of every 100 years. Up to 170 million people affected by coastal flooding each year. Adapting African coastlands will cost up to 10 per cent of these countries’ GDP. Melting of Greenland and West Antarctic ice sheet very likely, many Pacific islands lost. 20–50 per cent of land animal and plant species facing extinction. Most coral reefs bleached beyond recovery, severe impacts on fish stocks and animal-protein supply for tens of millions of people.
4°C and above	Up to 50 per cent decrease in water availability in South America, Southern Africa, and the Mediterranean. Disappearance of large glaciers in the Himalayas causes water shortages for a quarter of China’s population and hundreds of millions of people in India.
450–600 ppm CO ₂ -equivalent	Crop yields fall in all world regions. Africa and western Asia face up to 35 per cent loss in yields; some regions fall out of production completely, e.g. parts of Southern Africa and Australia.

An additional 220–400 million people could be exposed to malaria, 80 million in Africa alone. 1.5–2.5 billion additional people exposed to Dengue fever.

Loss of 30 per cent of global wetlands threatens livelihoods and food security for hundreds of millions of people.

Many small-island nations doomed. Major world cities such as New York, London, or Tokyo under serious threat from sea-level rise. Up to 330 million people permanently displaced due to sea-level rise. Up to 300 million people affected by coastal flooding each year.

* Concentration ranges assume a precautionary approach: no more than a 33 per cent chance of exceeding the given temperature. Derived from Meinshausen (2005) 'On the Risk of Overshooting 2°C'. Source: IPCC 2007, Stern 2006, and Tyndall Centre 2006.⁸

No excuse for inaction

The costs involved in addressing climate change may seem enormous, but when seen in perspective they are not prohibitively high. The United Nations Development Programme (UNDP) has put the annual costs to bring down emissions at around 1.6 per cent of global GDP between now and 2030.⁹ Lord Stern has estimated the total costs to be around 1 per cent of global GDP per year, while noting that the costs of inaction would be five to 20 times higher.¹⁰ Even under conservative forecasts for global economic growth over the next century, greenhouse-gas stabilisation at levels compatible with the 2°C objective would have the world reach a level of wealth just a couple of months later, compared with a business-as-usual scenario.¹¹ In short, there is no economic excuse for delaying the full decarbonisation of our societies, or for not starting to prepare for the already unavoidable impacts.

The ongoing financial crisis also helps put this challenge into perspective. The urgency shown by rich countries in tackling the financial meltdown stands in stark contrast to their lack of resolve to avert the worst effects of climate change and to help poor countries adapt to the impacts. The UK Government's bank-rescue package adopted in early October is worth roughly \$820bn (£500bn), but its pledged contribution to the Least Developed Country Fund (LDCF) to finance the most urgent adaptation measures in the poorest countries amounts to not even \$20m.¹²

Putting the world onto a low-carbon track creates opportunity for technological innovation and clean-energy industries, as well as employment for millions of people. But there are also indirect benefits: in Europe, for instance, reducing emissions from burning fossil fuels in Europe by 30 per cent by 2020 is expected to have annual health benefits worth €20–76bn in 2020 alone.¹³ Increasing energy efficiency by 20 per cent by 2020 reduces Europe's energy-import bill by €60bn annually.¹⁴ Similar benefits are available to developing countries. For example, the International Monetary Fund warned that Tanzania could see its oil-import bill amount to a daunting 37 per cent of its fiscal budget for 2008–2009¹⁵ – money then unavailable for other urgent needs. Energy efficiency and renewable energies, designed to meet the needs of poor people and favouring small-scale locally resourced systems that are managed by, and adapted to the needs of, local communities, can contribute significantly to poverty alleviation, sustainable development, and economic growth.

Next stop Poznań, last exit Copenhagen

At the 2007 UN climate talks in Bali, Indonesia, governments launched formal negotiations on global action, aiming at reaching agreement to take effect from the end of the first phase of the Kyoto Protocol in 2012.

Negotiations are set to conclude in Copenhagen in December 2009. During this period governments aim to negotiate a comprehensive framework for action that will commit rich countries to greater emissions reduction; encourage enhanced action in some developing countries through financial and technological support from developed countries; and deliver increased action on, and finance for, adaptation, in the most vulnerable countries.

At the COP14¹⁶ climate talks, taking place 1–12 December 2008 in Poznań, Poland, the key issues on the table regarding future international action include:

- 1 A global long-term reduction target for 2050. While the EU and others are seeking a clear target, countries like the USA or Canada insist that such a long-term target should rather be aspirational in nature, with no implications for action.
- 2 The range of emissions-reduction targets for developed countries in the post-2012 agreement (the Inter-governmental Panel on Climate Change (IPCC) notes that 25–40 per cent by 2020 corresponds most closely to the 2°C threshold).
- 3 The nature of mitigation actions by developing countries that so far have no obligations, as well as the timelines for related commitments. Countries like China and India insist that development remain their overriding priority and that developing countries need financial support and clean technologies from developed countries.
- 4 Financial support from developed to developing countries, as agreed under the United Nations Framework Convention on Climate Change (UNFCCC). Developing countries complain that support has been far below what is needed and should be increased, whereas the USA for instance claims to have fulfilled all commitments made under the UNFCCC.
- 5 Transfer of climate-friendly technologies from developed to developing countries, which had been promised long ago but never materialised. While developing countries consider rich countries to be obliged to transfer technologies, rich countries are trying to frame it mainly as a market issue, including the need to create enabling environments in developing countries.
- 6 Elements of a future framework for adaptation. Contentious issues will include the scale of funding required from rich countries to finance adaptation in poor countries. Governments will also discuss ideas to set up insurance mechanisms for vulnerable people in developing countries.

The UN climate talks in Poznań lie halfway between the Bali and Copenhagen talks, and must mark the turning point in the negotiations. Governments must at least agree in principle on the elements of the future

agreement, including institutional arrangements and the scale and type of commitments for developed and developing countries. This would allow governments to switch to 'full negotiation mode' in 2009, and achieve a comprehensive framework agreement in Copenhagen.

There is absolutely no more time to lose, but so far, global progress and determination has been inadequate to tackle climate change, falling well behind the compelling science exposing the pace and scale of the crisis. The Kyoto Protocol, signed in 1997, was never meant to be more than a modest first step (indeed some developed countries were even allowed to increase their emissions). Yet countries like Canada or Japan, and several European states, are far off their emissions-reduction targets (see Table 2). The USA unilaterally withdrew from the entire treaty after signing.

Table 2: Selected countries' Kyoto targets for 2008–2012 compared with current emissions, six Kyoto gases excluding LULUCF**

Country	Kyoto target relative to 1990 ¹⁷ emissions	2005 emissions, relative to their 1990 emissions
Australia	+ 8.0 %	+ 25.6 %
Canada	- 6.0 %	+ 25.3 %
EU-15 (joint target)	- 8.0 %	- 1.5 %
Germany	- 21.0 %	-18.4 %
Japan	- 6.0 %	+ 6.9 %
Spain	+ 15.0 %	+ 53.3 %
UK	- 12.5 %	- 14.8 %
USA*	N/A	+ 16.3 %

*Note the USA withdrew from the treaty in 2001. Source: UNFCCC 2007¹⁸

** Land use, land use change, and forestry

Global emissions have been rising faster in recent years than even worst-case scenario climate modelling tracked.¹⁹ In its most recent scenario, the IEA assumes global greenhouse gas emissions will rise by another 35 per cent between 2005 and 2030, putting the world onto a 6°C track – a recipe for planet meltdown²⁰. But scientists tell us that there is a very short window of opportunity to halt the pace of climate change and avoid catastrophic consequences. Neither Poznań nor, in 2009, Copenhagen can be allowed to fail. If the global effort to avoid disaster gets delayed by only a few years, future emissions-reduction pathways required to avert disaster may become too steep for current investment cycles, and for governments facing the reality of needing to make harsh and painful policies.

Box 1: Selected country positions ahead of the Poznań talks

Key players at the talks have vastly divergent positions and domestic emissions-reduction policies:

In the **EU**, countries like Germany or the UK, and the new Member States, are on track to meet their Kyoto commitments, while others (e.g. Spain or Italy) are far off. The EU has committed to cut emissions by 20 per cent below 1990 levels by 2020, and offered to increase the target to 30 per cent should other developed countries commit to comparable efforts. Germany promised a cut by 40 per cent by 2020, while the UK recently adopted an 80 per cent target for 2050. Italy and Poland, however, are trying to derail internal negotiations on a set of EU domestic policies to drive down emissions.

Emissions in **China** have risen dramatically over the past decade, although per-capita emissions remain much lower than those in the developed world. Yet China is planning to reduce the energy intensity of its economy by 20 per cent between 2005 and 2010, and has set itself a target of meeting 15 per cent of its energy needs from renewable sources by 2020.²¹

Until recently the **US** administration had chosen to free-ride on the climate, consistently refusing any commitment to reduce their emissions. Yet, with President-elect Barack Obama taking office in January 2009, things are set to change. Many expect the USA to sign up to a future agreement under the UNFCCC, and Obama has expressed support for a reduction of emissions in the USA by 80 per cent by 2050, below 1990 levels.

South Africa openly criticised the G8 countries for their weak global emissions-reduction target at the 2008 G8 summit. At the same time, the country is also recognising the need for 'substantial deviations below business-as-usual baselines in some developing country regions by 2020 and in all regions by 2050'.²²

In **Brazil**, government policies and programmes adopted since 2000 will reduce energy-related CO₂ emissions by 14 per cent by 2020 compared with business-as-usual.²³ But the country has recently received criticism from Brazilian NGOs that its new National Action Plan on Climate Change to a large extent consists of already existing measures, and includes no firm objectives for mitigating emissions.

India has recently published its National Action Plan on Climate Change that, while not setting emissions-reduction targets as such, aims at increasing energy efficiency and the use of renewable energies, especially solar power and biomass. In previous negotiations, India, with its very low per-capita emissions, has highlighted the lack of progress in rich countries, and has suggested the convergence of per-capita emissions in developing and developed countries as a base for a fair effort sharing.

In **Australia**, the government-sponsored Garnaut Climate Change Review proposed a reduction target for Australia of between 10 and 25 per cent below 2000 levels by 2020 – which is clearly not sufficient in an equitable allocation of the global mitigation task. During the negotiations, Australia has traditionally allied itself with those countries least willing to take meaningful action on climate, such as the USA, Canada, and Japan. However, the new Rudd Government is showing positive signs of a closer alignment with developing countries, including Australia's Pacific neighbours, and Oxfam would encourage these alliances.

Japan, also off the Kyoto track, advocates a weak long-term global reduction target of 50 per cent by 2050 – without giving a reference year. Japan wants sectoral mitigation potentials to add up to economy-wide reduction targets to ensure comparability of efforts – and also hopes that countries like South Korea or Mexico take on reduction obligations.

2 Safe *and* fair: sharing efforts equitably across nations

Development is our first priority. In any future regime, we are neither seeking income parity with the developed world nor are we seeking parity of lifestyles. But any future regime should allow us to at least rise to the poverty levels of the developed world. How can you deny us that?

Indian delegate at the UN talks in Bonn 2008

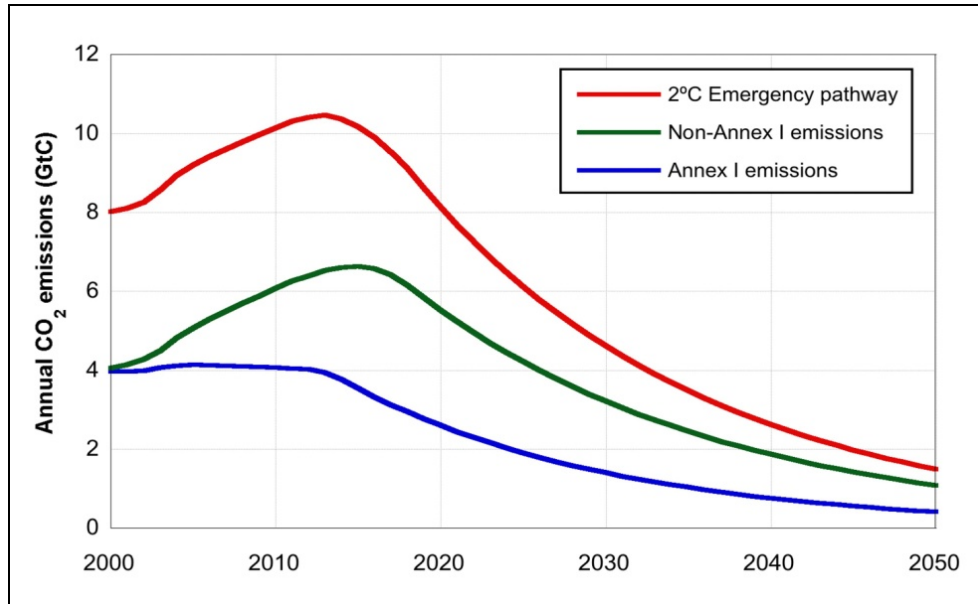
Two degrees: non-negotiable for the most vulnerable

Clearly, any level of global warming that would inevitably make large land areas uninhabitable, destroy the livelihoods of whole societies, including their poorest and most vulnerable communities, or lead to the loss of entire island nations, leaving populations no other option but to migrate, can neither be considered adequate nor acceptable. It is a fundamental flaw of the international negotiations that the people most exposed to the dire consequences of climate change are not being asked if they agree to live with, and suffer from, whatever level of climate change is considered 'acceptable' as the result of political bargaining.

Global warming must be kept below 2°C over pre-industrial levels. To achieve that objective with reasonable certainty, global emissions will have to peak by 2015 and then be cut back by at least 80 per cent below 1990 levels by 2050.²⁴ By comparison, the G8-backed target of cutting global emissions by 50 per cent by 2050 is woefully insufficient. Even if it had 1990 as a reference year, that target has no more than a fifty-fifty chance of keeping global warming below 2°C.²⁵ No one would put their child on a plane with a similar chance of crashing.

Yet a 2°C-consistent emissions pathway has a very serious consequence: even if emissions in developed countries fell by 25–40 per cent below their 1990 levels by 2020 (the range currently on the table at the negotiations), emissions in developing countries would have to deviate from a business-as-usual scenario by at least 15–30 per cent by 2020²⁶ (see Figure 1). This is the unforgiving consequence of the bankrupting of the global greenhouse-gas budget over the past century, mainly by the developed countries. So emissions need to decrease, *globally*, but the crucial question is: who is responsible for enabling this to happen?

Figure 1: Emissions pathways for developed (Annex I) and developing countries (Non-Annex I) required to preserve a high chance of avoiding a >2°C increase



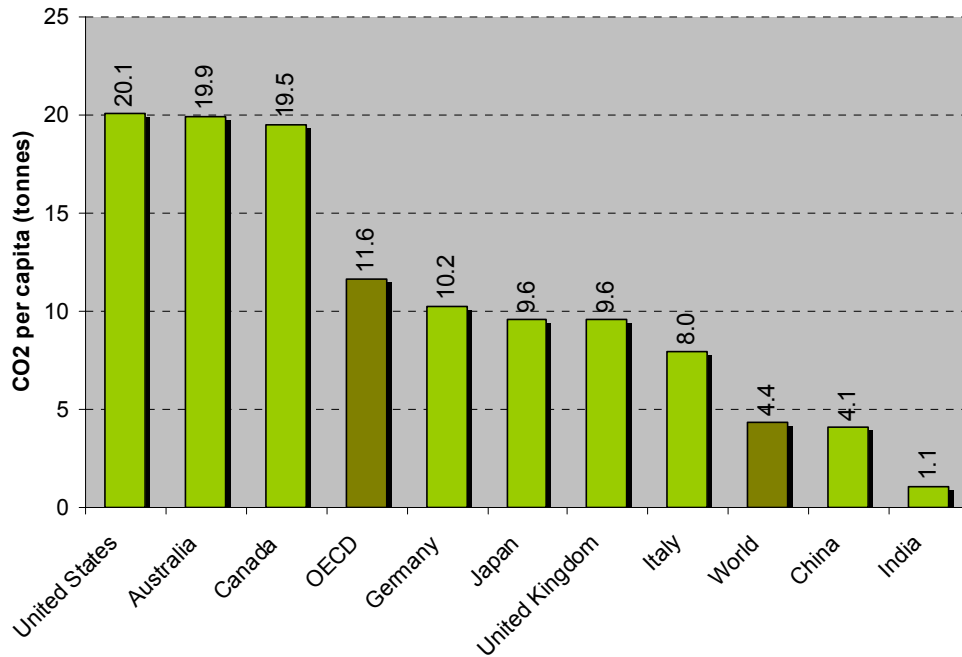
Source: Ecoequity 2008

A fair sharing of effort

Keeping global warming to below 2°C constitutes a massive global challenge. Clearly no one country and no group of countries can meet the challenge alone. Rich countries, especially those with the highest emissions, are now pointing to countries like China whose CO₂ emissions are said to have surpassed those of the USA in 2006.²⁷ Yet if rich countries had *per-capita* CO₂ emissions not higher than China, global CO₂ emissions would already be around 30 per cent below 1990 levels.²⁸

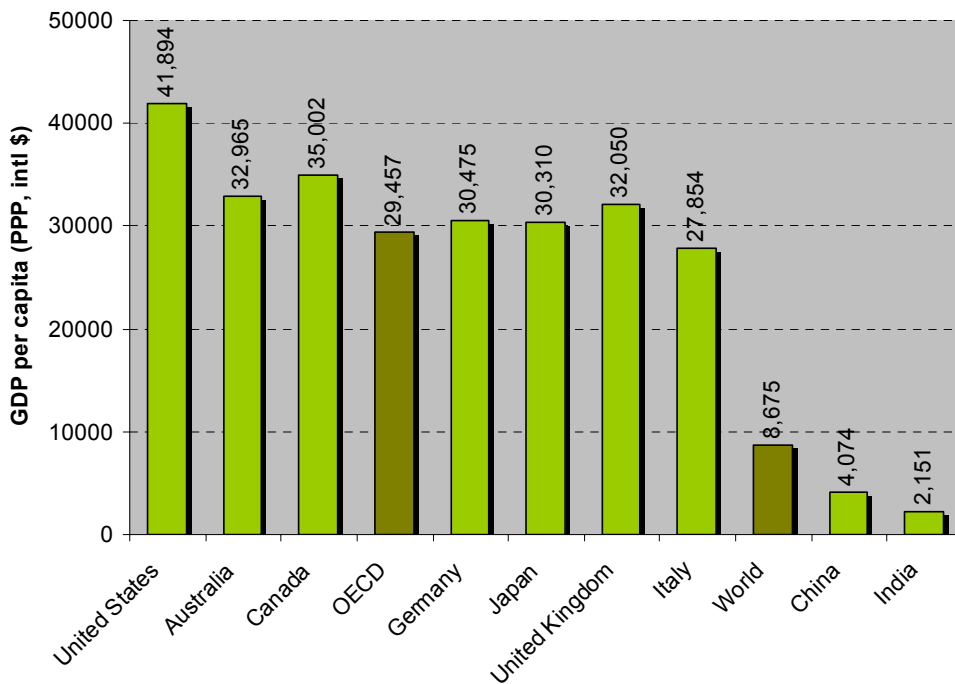
Any fair assessment must take into account historical emissions on a per-capita basis (see Figure 2), which would reveal that rich countries are most responsible for climate change. This is largely a result of too much, and too inefficient, use of fossil-fuel energy – upon which these countries have built the enormous wealth that now makes them much more economically capable than poorer countries to respond: per-capita GDP in the Organisation for Economic Co-operation and Development (OECD) member countries is almost eight times that of China and 14 times that of India (see Figure 3).

Figure 2: 2005 per capita CO₂ emissions



Source: EIA 2007; World Bank 2008²⁹

Figure 3: 2005 per capita GDP



Source: World Bank 2008; IMF 2008³⁰

The UNFCCC stipulates that all countries should contribute to the effort according to their 'common but differentiated responsibilities and respective capabilities'.³¹ Oxfam calls for operationalising this principle when sharing the global effort to confront climate change in the future, including when allocating obligations for both mitigation and adaptation under the post-2012 regime. This should on the one hand follow objective

criteria such as cumulative per-capita emissions and per-capita income of countries. On the other hand, it should explicitly protect poor people's right to development, which is the recognised right of all people to fully realise human rights and fundamental freedoms.

Can this be done and, if so, what would it look like? The Greenhouse Development Rights (GDR) framework, invented by the US think tank Ecoequity,³² is gaining attention as one of several possible ways to frame shares of the global effort required to keep warming below 2°C.³³ Based explicitly on equity principles, the approach defines a country's *responsibility* as its total per-capita emissions (since 1990), and its *capability* as income above a so-called 'development threshold' (people falling below this threshold are not expected to contribute to the global effort). The specific, quantitative results and underlying assumptions of the GDR approach can and should be subjected to wider critical examination, but the overall picture is consistent with what many observers consider to be a fair allocation of responsibility and capability. Any objectively defined responsibility-capability approach gives rise to two important observations.

First, while development still remains a priority for poor countries, the situation has changed considerably since 1992 when the current division between Annex I and non-Annex I countries was established.³⁴ Some countries not in Annex 1 now have higher levels of per-capita income and per-capita emissions than several industrialised countries bound by the Kyoto Protocol. This picture will become even starker, as those advanced developing countries continue to grow, with an emerging globalised middle class of relative wealth that will ultimately be expected to contribute to the global effort in some way.

Second, and despite the first observation, industrialised countries continue to bear the lion's share of global effort required – even beyond 2030. The GDR framework assigns more than three-quarters of the global effort to developed countries in 2010. In a 2°C scenario, this correlates to obligations for developed countries significantly higher than the often-quoted 25–40 per cent range of rich-country reductions by 2020.

The GDR approach suggests that, for example, the EU faces a global mitigation obligation that is equivalent to a reduction of its emissions by almost 80 per cent by 2020, below 1990 levels.³⁵ Unless developing countries accept a highly unfair burden to mitigate, the 25–40 per cent range for developed countries is, by a wide margin, at odds with the EU's own 2°C objective. Put another way, if developed countries reduced their domestic emissions by 25–40 per cent, this would *still* leave them far short of meeting their full fair share of the global effort. To discharge the remainder, the EU would be required to enable mitigation in developing countries, through the provision of finance, technology, and capacity-building.

A world where everyone is given a chance to adapt

Global average temperatures have already increased by 0.8°C above pre-industrial levels. The world is locked into more warming as a result of greenhouse gases already in the atmosphere, and the necessary transition period until global emissions reach very low levels. Hence even the most

stringent global mitigation efforts will leave us with a level of now unavoidable climate change – to which societies will have to adapt.

The challenge will be hardest for poor and vulnerable people, who will be hit first and worst by climate change. Ensuring that especially the most vulnerable people are given the chance and the necessary support to adapt will require far-reaching shifts in our thinking on global and social justice.

Public finance will be required to meet the costs of adaptation, as private finance will be insufficient, with adaptation measures providing little commercial investment opportunity. Also, securing the rights and livelihoods of vulnerable communities is in large part a public responsibility. Current finance is nowhere close to scale. Funds under the UNFCCC to finance adaptation, such as the LDCF, hold less than \$120m,³⁶ and the Kyoto Adaptation Fund is expected to generate only \$80–300m³⁷ annually over the years up to 2012.

The Bali Action Plan mandates the search for adequate, predictable, new and additional finance for adaptation. Oxfam estimates the costs of adaptation in developing countries to be at least \$50bn annually, and far more if emissions are not cut fast and far enough.³⁸ UNDP has put these costs as high as \$86bn a year.³⁹ An exact cost estimate will require more detailed research, but we can be sure that the annual costs will be several tens of billions of dollars. Oxfam calls for an increase in finance for adaptation by over a hundred-fold above current levels. Under a responsibility and capability assessment, rich countries must provide most of the resources needed to realise adaptation in developing countries.

3 Effective: mitigation in the future regime

We, on our part, are committed to undertaking nationally appropriate mitigation and adaptation actions which also support sustainable development. We would increase the depth and range of these actions supported and enabled by financing, technology and capacity-building with a view to achieving a deviation from business-as-usual. [...] Developed countries should commit clearly to significant additional financing to support both mitigation and adaptation in developing countries.

G5 statement, issued by Brazil, China, India, Mexico, and South Africa on the occasion of the 2008 Hokkaido Toyako Summit, Sapporo, July 8, 2008.

Obligations in a future regime

Countries must contribute to meeting the global mitigation effort, following a fair and equitable assessment of countries' historic responsibility and their capability. Developed countries must clearly take the lead in cutting emissions at home first and furthest – in addition to providing money and technology for action in developing countries with large carbon footprints. Any objective responsibility-capability approach suggests that some more advanced developing countries should ultimately, if not immediately, be expected to contribute more actively to the global effort on their own. Levels and types of contributions from all countries must add up to global emissions peaking by 2015 and decreasing by at least 80 per cent below

1990 levels by 2050. Such an emissions pathway must comprehensively cover all relevant greenhouse gases and sources, and include emissions from international aviation and maritime transport as well as emissions related to deforestation or forest degradation.

The following discussion makes clear that demonstrable evidence of leadership in emissions-reduction efforts on the part of developed countries is an important starting assumption for any viable future regime, including consideration of appropriate actions by developing countries.

Mitigation targets for developed countries

For developed countries, a fair effort sharing in a future agreement would require that these countries continue with binding absolute, economy-wide⁴⁰ emissions-reduction obligations. Such obligations must lead to their overall *domestic* emissions declining by at least 25–40 per cent by 2020 from 1990 levels, looking at long-term reductions at the upper end of the range of 80–95 per cent by 2050.⁴¹

The 25–40 per cent range might be considered to be achievable through domestic emissions reduction, but this will be insufficient to meet developed countries' full fair share of the global mitigation effort. Therefore, these countries should accept a legally binding obligation to enable mitigation in developing countries, through providing measurable, reportable, and verifiable support in the form of finance, technology, and capacity-building. The level of this international obligation should be defined by a country's overall share of the global effort minus what the country aims to achieve domestically, i.e. within the 25–40 per cent range.

Mitigation action in developing countries

No developing country is currently expected to adopt the same kind of commitments as developed countries (binding national targets) under the post-2012 agreement. The failure by developed countries to demonstrate leadership in reducing emissions consistent with the objective of the UNFCCC,⁴² the mismatch between their commitment and delivery of finance and technology for adaptation,⁴³ and the wider reality of inaction and broken promises by rich countries – on aid, trade, and the global food crisis to name a few areas – all combine to make calls for comparable commitments by developing countries in the run-up to Copenhagen highly inappropriate.

And yet it is clear that any global regime that aims to limit global warming to below 2°C will fail without global co-operation – including contributions from those developing countries with significant responsibility and capability. In this respect, ongoing negotiations on developing countries' actions should recognise the mitigation efforts some developing countries are *already* making independently, such as China's renewable-energy policies or India's measures to increase energy efficiency in the housing sector. In a statement issued at the 2008 G8 summit, Brazil, China, India, South Africa, and Mexico committed 'to undertaking nationally appropriate mitigation and adaptation actions which also support sustainable development.'⁴⁴ Negotiations on actions by developing countries should be guided by the following:

First, the least-developed and other poor and vulnerable countries, as well as small-island developing states, will (justifiably) keep adaptation and development as their overriding priorities, including measures to increase access to basic energy services (which would scarcely increase emissions⁴⁵). These countries should not be expected to prioritise emissions cuts, but should still be eligible to receive support from developed countries for low-carbon development as well as for adaptation.

Second, more advanced developing countries, with fast-growing per-capita emissions, should contribute to the global effort in accordance with their national circumstances and their 'common but differentiated responsibilities and respective capabilities'.⁴⁶ This points to a graduated set of commitments and actions for different countries that measurably contributes to the global effort but which is premised on a trust-building approach that '...rewards developing countries for reducing emissions, but does not punish them for failing to do so'.⁴⁷ Actions under such an approach should maximise sustainable-development and poverty-alleviation benefits, focusing on the needs of very poor and marginalised people. The kinds of actions consistent with this approach that are under discussion include:

- **No-regret options:** Developing countries should pledge to realise those measures that do not constrain development, but often have net gains that exceed costs. For example, improving public transport can improve air quality and reduce a country's dependence on imported oil. As countries develop, more of these no-regret options will become available. In some cases these actions could be supported through crediting mechanisms linked to the global carbon markets.
- **Sectoral actions:** Developing countries could undertake actions in individual sectors, such as electricity production, or specific globalised energy-intensive sectors such as steel, cement, or aluminium. Actions could be related to nationally appropriate benchmarks, and could be achieved partially through a country's own means or through financial and technological support from developed countries. Surplus achievements beyond previously agreed targets could be linked to the global carbon markets, while under-achievements would not result in penalties. Obviously, developing countries could address emissions in several sectors at once, or assume a gradual phase-in of multi-sector coverage.
- **Expanded and reformed Clean Development Mechanism (CDM):** There are proposals to expand the existing CDM to a more programmatic or sectoral CDM, covering entire sectors rather than single projects,⁴⁸ or crediting developing countries' mitigation *policies* (such as a feed-in law for renewable energies). Oxfam stresses that any reform of the CDM should improve integration with national development planning, including through meeting certain internationally adopted sustainability criteria,⁴⁹ and contributing to technology transfer. Also, the future CDM should have administrative costs reduced for small-scale measures and those hosted by least-developed countries.

- **Sustainable development policy and measures:** Some of the poorer developing countries could contribute an action-oriented approach that prioritises sustainable development, but also helps mitigation.⁵⁰ If systems were in place to credit such actions on the part of poor countries, this might provide incentive. Developed countries could also provide finance and technology for these actions, as part of their obligations to support mitigation in developing countries.

Incentivising actions in developing countries through linking achievements to the global carbon markets has caveats, because it allows developed countries to purchase such credits instead of reducing their own emissions. This delays the transformation of developed countries' economies unless an influx of credits from new mechanisms is complemented by an equivalent increase of developed countries' overall mitigation commitments.

A separate mechanism will be required to address emissions from deforestation and forest degradation in developing countries. Any approach should primarily aim to protect forest ecosystems for the many values they represent rather than only to reduce carbon emissions. Oxfam also believes that any measures introduced must protect and respect the rights and livelihoods of indigenous peoples and other communities dependent on forest resources. Careful stewardship of forest resources has the potential to help poverty-reduction efforts and maintain biodiversity, as well as contributing to global climate-change goals. Whether the mechanism is financed through a dedicated fund or a market-based system is subject to negotiation, but any market-based system must not undermine the overall environmental effectiveness of the regime. A flood of cheap credits in the carbon markets, for example, could seriously delay and weaken domestic mitigation efforts in developed countries.

Box 2: Sequencing mitigation actions: is there a role for a rich-country performance trigger?

As negotiations towards a global deal on climate change heat up, a major sticking point between developed (Annex I) and developing (non-Annex I) countries relates to the sequencing of commitments and actions, respectively. Developing countries believe rich countries must deliver on past commitments *and* commit themselves to deeper emissions cuts and substantial transfers of finance and technology prior to extending the negotiation of developing-country contributions beyond those foreseen in the Bali Action Plan. Meanwhile, many rich countries are already pushing for developing countries to do more.

One option to address the concerns of both sides – and raise the level of ambition overall – might be for certain developing countries to negotiate more ambitious mitigation contributions, as part of a post-2012 commitment period, that only take effect if and when Annex I countries have achieved certain agreed performance 'triggers'. Various types of triggers are possible, including achievement by Annex I (jointly or individually) of certain emissions-reduction milestones, such as interim targets or 'peak' emissions.

This approach serves the interests of both sides: Annex I countries have confidence that their efforts will be complemented by more ambitious contributions from non-Annex I, and non-Annex I countries are assured that any additional effort on their part will be preceded by actual delivery of Annex I commitments. The Bali Action Plan already contemplates non-Annex I contributions that are contingent on the provision of measurable, reportable, and verifiable finance and technology. A rich-country performance trigger could extend and complement this approach to drive even more ambitious global action in a post-2012 regime.

Measurable, reportable, and verifiable support for mitigation actions

Governments at the UN climate talks in Bali agreed that while all countries should tackle emissions, actions by developing countries require measurable, reportable, and verifiable support from rich countries.

Governments also mandated the search for adequate, predictable, new and additional finance as well as increased development, diffusion, and transfer of urgently needed technologies.

Both provisions are closely linked to assessing countries' fair share of the global mitigation effort. Essentially, it is through this support that developed countries would be able to discharge that proportion of their total obligation that they are unable to achieve through domestic measures (or the carbon markets). The extent of mitigation efforts by developing countries will be directly related to, and partially *contingent upon*, such support provided by developed countries.

Oxfam therefore recommends accounting for this support in terms of mitigation enabled in developing countries, through the provision of finance, technology, and capacity-building. The support, by its nature as fulfilment of the developed countries' total obligations, should not be considered aid, but rather a firm, legally binding obligation under the post-2012 regime. The group of developing countries in the negotiations has called on developed countries to provide 0.5–1 per cent of their GDP for adaptation and mitigation action in developing countries, additional to official development assistance (ODA).⁵¹ A recent report to the European Parliament quantifies the EU's obligation to enable mitigation in developing countries, suggesting that, in a fair sharing of effort to keep global warming below 2°C, the EU would be asked to enable a deviation in developing countries of up to 1.6 gigatonnes of CO₂ equivalents by 2020.⁵²

How could this work in practice? One option is for mitigation actions in developing countries to be directly combined with the obligation by developed countries to support these actions (as a way to discharge their overall mitigation obligation), forming a *joint commitment* to realise the needed deviation of emissions.

As part of such a joint commitment, a developing country would identify nationally appropriate mitigation actions to achieve a deviation, for example in a certain sector, plus an assessment of what proportion of the planned deviation would depend on finance or technology from developed countries. The country would then make a deviation pledge, for example in the given sector, the achievement of which is *contingent upon* receiving the required support.

At the same time, developed countries could accept obligations to provide the resources required, as part of their overall mitigation obligation, i.e. expressed in mitigation achieved. The developing country would be issued credits for the achievements on the deviation pledge that developed countries either purchase (and retire) directly, at market rates, or through an international fund, to which they contribute. Meeting technology needs facilitated through a future technology mechanism would be similarly

accounted for in terms of resources by developed countries sent to that mechanism.

If, over time, the support (e.g. through purchase of the deviation credits) does not materialise to the agreed extent, the developing country's pledge is lowered proportionally. If the developing country over-achieves on its pledge, the surplus mitigation can be sold to the carbon markets. If the country under-achieves, it receives no penalties, but proportionally less support, e.g. from the fund.

A technology transfer and diffusion mechanism

The necessary speedy and thorough uptake of renewable energy and energy-efficiency technologies in developing countries is a pre-condition for securing both climate stability as well as development prospects in these countries. The UNFCCC estimates that, by 2030, close to \$180bn will be needed in developing countries annually, in order to keep emissions within safe levels.⁵³ A large portion of that sum will be required for the take-up of clean technologies, including both the transfer of such technologies from developed to developing countries, as well as technology diffusion within developing countries.

Oxfam believes that while the private sector will have to play its role, sufficient transfer and diffusion of climate-friendly technologies in developing countries will not surface on the scale and speed required, if left to markets or private investments alone. Instead, the transfer of technologies should be considered a vehicle for developed countries to meet their obligations under a fair effort sharing of the future regime, i.e. fulfil these countries' mitigation obligation beyond what they can achieve at home (see above).⁵⁴

Transfer, deployment, and diffusion of technologies should be consistent with sustainable-development and poverty-reduction objectives. Any mechanism established must focus on benefits to the poorest and marginalised parts of society; protect people's rights; and be fully accountable to poor people and their needs.

Oxfam calls on governments to include an effective mechanism for the diffusion and transfer of technology to developing countries in the post-2012 climate regime. Such a mechanism, setting up the required institutional arrangements as well as defining clear obligations by countries, would be equipped to assist in mitigation actions taken by developing countries under the post-2012 agreement.

The mechanism would in particular:

- be funded by contributions from developed countries based on the fair effort sharing, using innovative generation instruments such as auctioning a proportion of developed countries' emissions allocations (Assigned Amount Units or AAUs) in the future regime;
- provide support to developing countries for technologies these countries have identified as necessary in order to deliver on their agreed mitigation actions;

- overcome intellectual property-rights (IPR) barriers for technologies where developing countries have identified these to be preventing the uptake of technologies, pursuing sustainable development at the same time;
- identify technologies available in the public domain and facilitate their uptake and diffusion in developing countries;
- finance international research on new and emerging technologies deemed critical for developing countries' speedy transformation to low-carbon.

It should be noted that not all technology transfer will or should be from developed to developing countries. For example, in the field of adaptation there are existing technologies in some developing countries that should be made available to other countries. The mechanism would facilitate such exchanges and provide the required resources.

4 Prepared: adapt to the unavoidable

By now, we know a lot about adaptation. Yet we keep on talking and talking. What we need is implementation, and where we do not know enough, we should start learning by doing.

African delegate at the UN talks in Bonn 2008

Adaptation in the future climate regime

The post-2012 agreement must massively scale up adaptation implementation in developing countries, under a new, comprehensive, and coherent framework for adaptation.⁵⁵ Such a framework should define clear obligations and quantifiable commitments by developing- and developed-country governments, and create institutional arrangements. It would enable and scale up immediate and long-term implementation of adaptation measures in developing countries, including reducing vulnerability, increasing resilience, and minimising or preventing climate-related risks. It would also incorporate and link to the work of existing institutions and organisations with experience in the field, such as the Red Cross, the Food and Agriculture Organization, UNDP, the United Nations Environment Programme, and others.

Actions under the framework will require, to some degree, a learning-by-doing approach, as existing knowledge does not have answers to all forms of climate impacts that will confront us in the future. But the alternative, waiting until we know more, while people lose their lives and livelihoods through climate change, is clearly not an option. Adaptation could involve introducing drought- or flood-tolerant crops, training, or equipment for rainwater-harvesting to cope with altered rainfall patterns, but it could also mean building higher roads and bridges in flood-prone areas, or providing building modifications in areas increasingly struck by hurricanes. Comprehensive approaches would also include community-based disaster risk-reduction measures, mechanisms such as crop insurance with payouts triggered by climate-related events, as well as increased humanitarian relief after extreme weather events have struck.

The framework should encourage the alignment of adaptation strategies and associated measures for their implementation with long-term development planning. This is because vulnerability to climate change and people's ability to adapt are usually influenced by factors that are also relevant for conventional development agendas, including those of poverty reduction, education, health, and other social, economic, or cultural aspects. It should not be forgotten that this is a huge extra burden for poor people in developing countries. The need to adapt is mostly a result of rich countries' emissions. Adaptation costs in coastal countries in Africa, for example, are expected to get as high as 10 per cent of these countries' GDP.⁵⁶ This must be reflected by providing the finance needed in addition to existing ODA targets, in the form of compensatory finance.

Elements of the framework for adaptation

Oxfam suggests that the framework for adaptation should be built on the areas listed below. Given the diversity of developing countries' circumstances and their adaptation needs, countries would be given the choice to apply ideas from some or all of the areas, according to relevance and need. Measures taken – and finance made available – in each of these areas should always aim to meet the needs of the most vulnerable communities, indigenous peoples, and marginalised groups, including women. Measures should ensure these people's full participation in the development and implementation of adaptation activities; maximise the use of local, traditional, and indigenous knowledge; and safeguard people's basic human rights (such as the right to adequate food) as well as their economic, social, and cultural rights – rights that most countries have promised to respect and protect under various international conventions and declarations.

- **Adaptation projects and programmes.** There are countless adaptation measures that are already known to be necessary, many of them very urgent. These should be covered in an area of the adaptation framework that essentially continues the operations of the Kyoto Adaptation Fund after 2012, ensuring that all efforts in this area are fully aligned with development priorities.
- **Preparation and implementation of Long-term Adaptation Action Strategies.** Such strategies would fully align adaptation with development planning and link it firmly with the prevention and reduction of climate-related risks. They would be developed, implemented, and monitored through a transparent and inclusive process involving stakeholders such as local communities, indigenous people, women representatives, and NGOs. Rooting preparation and implementation at the local level is key, as adaptation is very context- and site-specific. It is dependent on local knowledge of risks, exposure, and needs in order to reduce vulnerability and increase adaptive capacity. Adaptation strategies should be seen as work in progress, with implementation happening alongside regular updating of the plans, using a learning-by-doing approach.
- **An adaptation technology-transfer mechanism.** Such a mechanism would scale up the diffusion and transfer of adaptation technologies, including through the removal of IPR barriers. It would operate either as a mechanism in its own right or as part of a general technology-transfer mechanism for both mitigation and adaptation. As should be the case for all adaptation measures, technologies for adaptation should be targeted at the needs of the poorest and most vulnerable people, including women, favouring small-scale technologies that can be taken up and adapted locally.
- **A permanent, multi-stakeholder adaptation body under the UNFCCC.** This body would assess the progress of implementation and recommend further action to the COP, develop guidelines for preparation of the national adaptation strategies, and assist the adaptation finance mechanism. It should take the form of a multi-stakeholder forum with input from governments, experts, and civil

society as well as local communities, indigenous peoples, and women representatives, among others. Its work would be closely linked with the UN Hyogo Framework for Action for disaster reduction.

- **The enhancement or establishment of national or regional centres or networks, as appropriate, on adaptation, climate resilience, and disaster risk-reduction and prevention.** Such centres or networks would increase research and capacity-building efforts across regions as well as be closely linked to national and local levels, involving stakeholders such as local communities or marginalised groups. The centres would develop and share knowledge and experience as well as assist with adaptation-implementation activities. They would operate with close links to other existing institutions or networks outside the UNFCCC which have proven expertise in fields that are relevant to adaptation, again including the UN Hyogo Framework for Action for disaster reduction.

Oxfam also suggests bringing the LDCF and the adaptation-related provisions of the Special Climate Change Fund (SCCF) under the umbrella of the adaptation framework. That would include a package to secure the needed \$1–2bn for full implementation of the National Adaptation Programmes for Action in the least-developed countries.

A global adaptation finance mechanism⁵⁷

Oxfam calls for the establishment of a dedicated adaptation finance mechanism as an integral part of the post-2012 climate regime, in order to cover the full costs of adaptation activities in the areas listed in the proposed framework above. The mechanism would ideally build on principles and experiences as well as governance structures of the Kyoto Adaptation Fund, as it provides a fair and appropriate level of representation of developing countries. However, the current generation instrument, the 2 per cent levy on the CDM, will not generate sufficient finance in the future.⁵⁸ New-generation instruments are needed in order to deliver an adequate level of funding on the order of at least \$50bn annually, of principally grant-based finance from developed countries, in addition to existing ODA commitments (0.7 per cent of GNI). Oxfam believes the most promising options for raising the needed finance would be to auction a fraction of emissions allocations (AAUs) to developed countries under the post-2012 agreement, and to set up emissions-trading systems for both international aviation and shipping, with auctioning permits, using revenues to fund adaptation in developing countries.

5 Conclusions

The EU came to meetings so far empty-handed. Poznań must be different.

EU delegate at the UN talks in Accra 2008

The Council of the European Union [...] pledges to cooperate with all Parties to ensure that the Poznań Conference marks the transition from discussion to full negotiating mode, [...] outlines the main elements of the Copenhagen agreement, and prepares the successful conclusion in 2009 [...] in a comprehensive agreement.

Conclusions of the EU Environment Ministers, Brussels 2008

Poznań will be a moment to take stock of whether governments are on track to make the 2009 deadline. Critically, with the shape of the Copenhagen agreement in mind, negotiators will need to ensure that all the relevant issues and options are on the table. For the poorest people facing the biggest risks from climate change, it is the issues and options necessary for a safe and fair future that matter most. Poznań should result in the following:

- 1 Agreement to negotiate a treaty that actually keeps global average temperature increases well below 2°C, and recognition that achieving this requires global emissions to start falling around 2015 and be cut by at least 80 per cent by 2050, from 1990 levels.
- 2 Establishment of the principle to share the global effort across nations based on objective criteria for historic responsibility for climate change and capability to confront the challenge, ensuring no unfair burdens for developing countries.
- 3 Recognition that the current reduction range for developed countries of 25–40 per cent by 2020, from 1990 levels, is insufficient to meet the 2°C objective in a fair effort sharing, if it is not backed up by additional obligations by developed countries to enable mitigation in developing countries.
- 4 Governments narrowing down the range of options for enhanced action on mitigation by developing countries, including what proportion of such mitigation efforts would be delivered through the provision of finance, technology, and capacity-building from developed countries.
- 5 Agreement on a vision on future global efforts on adaptation, to become part of the ‘Shared Vision’, on a par with mitigation, meeting the need to massively scale up adaptation to climate change through a framework for adaptation, funded through adequate finance from developed countries in the order of at least \$50bn annually.
- 6 Agreement in principle on what the mechanism for technology transfer, for both adaptation and mitigation, would look like; including what quantifiable obligations developed countries should take.
- 7 A narrowing down of the options available to two or three possible finance instruments that can generate the necessary funding for the post-2012 agreement, for both mitigation and adaptation. This should include an implicit or explicit agreement on the scale of funding

required as well as at least some preliminary institutional considerations and governance issues and purposes.

- 8 A broad understanding of the central elements of the future regime, including level and types of targets and actions by different countries for both mitigation and adaptation; a general understanding on the level and types of measurable, reportable, and verifiable support to developing countries; and a clearer picture of the necessary institutional arrangements such as for the transfer of technologies.
- 9 Agreement on an adequate work plan for 2009, ensuring all issues have been discussed and all proposed elements of the future regime have been explored in sufficient detail before Copenhagen.

Notes

¹ Oxfam (2008) 'Climate Wrongs and Human Rights: Putting People at the Heart of Climate Change Policy', Oxfam Briefing Paper No. 117, Oxford: Oxfam International.

² IPCC (2007) 'Climate Change 2007', Fourth Assessment Report (AR4).

³ Oxfam International (2008) 'Climate Wrongs and Human Rights', Oxfam Briefing Paper 117, www.oxfam.org.uk/resources/policy/climate_change/downloads/bp117_climatewrongs.pdf.

⁴ World Bank (2008) 'Food Price Crisis Imperils 100 Million in Poor Countries, Zoellick Says', <http://go.worldbank.org/5W9U9WTJB0>.

⁵ FAO (2008) 'World Food Situation', www.fao.org/worldfoodsituation/wfs-home/en/.

⁶ UNDP (2007) *Human Development Report 2007/2008*, New York: UNDP.

⁷ Practical Action, Christian Aid, Oxfam, and Tearfund (2007) 'Two Degrees, One Chance'.

⁸ See notes 2 and 6 as well as M.G.J. den Elzen and M. Meinshausen (2005) 'Meeting the EU 2°C Climate Target: Global and Regional Implications', Netherlands Environmental Assessment Agency; M. Meinshausen (2005) 'On the Risk of Overshooting 2°C', submitted to the conference 'Avoiding Dangerous Climate Change', Hadley Centre.

⁹ UNDP (2007) 'The Struggle Against Climate Change', New York: UNDP. This figure relates to keeping greenhouse-gas concentrations at 450ppm, which gives only a 50 per cent chance of keeping warming below 2°C.

¹⁰ Stern, N. (2006) 'Stern Review: The Economics of Climate Change', and 'Cost of tackling global climate change has doubled, warns Stern', *The Guardian*, June 2008.

¹¹ Schneider, S. and Azar, C. (2001) 'Are Uncertainties in Climate and Energy Systems a Justification for Stronger Near-term Mitigation Policies?'.

¹² GEF (2008) 'Status Report on the Climate Change Funds as of March 4, 2008'.

¹³ World Wildlife Fund (2008) 'The Co-Benefits to Health of a Strong EU Climate Change Policy'.

¹⁴ European Commission (2006) 'Action Plan for Energy Efficiency: Realising the Potential'; COM (2006) 545 final.

¹⁵ Xinhua News Agency (2008) http://news.xinhuanet.com/english/2008-06/26/content_8443466.htm.

¹⁶ 14th Meeting of the Conference of the Parties to the UNFCCC as well as the 4th Meeting of the signatories to the Kyoto Protocol. See www.unfccc.int.

¹⁷ Targets for EU countries vary from Kyoto Protocol Annex B in line with internal EU arrangements for joint fulfilment of Kyoto Protocol commitments as set out in EU Council Decision 2002/358/CE: 'Concerning approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder, 25 April 2002: http://eur-lex.europa.eu/pri/en/oj/dat/2002/l_130/l_13020020515en00010020.pdf'

¹⁸ UNFCCC (2007) *op.cit.*

¹⁹ Raupach, M., Marland, G., Ciais, C. *et al.* (2007) 'Global and Regional Drivers of Accelerating CO₂ Emissions'. Global CO₂ emissions from fossil-fuel burning and industrial processes have seen growth rates greater than 3 per cent per year between 2000 and 2004; greater than in the most fossil-fuel intensive scenarios of the IPCC.

²⁰ IEA (2008) 'World Energy Outlook 2008', Paris: OECD/IEA

²¹ World Resource Institute (2008) 'Energy and Climate Policy Action in China', Fact Sheet.

²² Government of South Africa (2008) press release issued by the Ministry of Environmental Affairs and Tourism, July.

²³ Center for Clean Air Policy (2007) 'Greenhouse Gas Mitigation in China, Brazil and Mexico: Recent Efforts and Implications'.

²⁴ Parry, M., Palutikof, J., Hansen, C. and Lowe, J. (2008) 'Squaring up to reality', *Nature Reports Climate Change*, May. The most ambitious scenario analysed by the IPCC AR4 aims at greenhouse-gas concentrations of 450ppm CO₂ equivalents, which suggest that emissions should peak between 2000 and 2015 and be reduced by 50–85 per cent below 2000 levels – aiming for global warming of 2–2.4°C.

²⁵ See note 24.

²⁶ Den Elzen, M. and Höhne, N. (2008) 'Reductions of greenhouse gas emissions in Annex I and non-Annex I countries for meeting concentration stabilisation targets', *Climatic Change* 91(1).

²⁷ Netherlands Environmental Assessment Agency (2007) 'China now no.1 in CO₂ emissions; USA in second position', press release June 2007.

²⁸ Based on 2004 data from <http://cait.wri.org>.

²⁹ Based on CO₂ data from 'International Energy Annual 2005', Energy Information Administration (2007), and population data from 'World Development Indicators' online database, World Bank (2008).

³⁰ Based on population data from World Bank (2008) and GDP data from 'World Economic Outlook Database', International Monetary Fund (2008).

³¹ UNFCCC, Article 3.1.

³² Ecoequity (2007) www.ecoequity.org/GDRs.

³³ Another prominent effort-sharing approach that also is explicitly based on responsibility and capability principles (among others) is the South–North Dialogue's 'Equity in the Greenhouse' proposal. See www.wupperinst.org/uploads/tx_wiprojekt/1085_proposal.pdf.

³⁴ Annex I of the UNFCCC lists industrialised countries that were given emission reduction or limitation obligations. Countries in Annex I are: Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, UK, and USA.

³⁵ Ecoequity, Stockholm Environment Institute (2008) 'A Call for Leadership - A Greenhouse Development Rights analysis of the EU's proposed 2020 targets', see www.ecoequity.org.

³⁶ See note 12.

³⁷ UNFCCC (2007) 'Investment and Financial Flows to Address Climate Change'.

³⁸ Oxfam (2007) 'Adapting to Climate Change: What's Needed in Poor Countries, and Who Should Pay', Oxfam Briefing Paper No. 104, Oxford: Oxfam International. The estimate includes the costs of integration of adaptation needs into development planning, the climate-proofing of infrastructural investments and the existing stock of natural and physical capital, the costs of new investments needed specifically because of climate change, and the costs faced by community-level actors.

³⁹ See note 6.

⁴⁰ Sectoral approaches may be useful to make commitments by developed countries more comparable, but Oxfam stresses that they must remain subordinate to developed countries' binding economy-wide mitigation obligations, which should be derived from the overall global reductions needed and each country's fair share of the global effort.

⁴¹ See note 2, WG 3 report, chapter 13. The Environment Council of the European Union has also officially recorded in its October 2008 Council Conclusions that such a steep cut will be necessary to meet the EU's objective of keeping global warming to below 2°C.

⁴² UNFCCC Article 4.2(a).

⁴³ UNFCCC Articles 4.3 and 4.4.

⁴⁴ G-5 Political Declaration, see <http://pib.nic.in/release/release.asp?relid=40146>.

⁴⁵ Providing basic energy services obviously remains relevant not only for these extremely poor or vulnerable countries; yet globally, providing such services to the 2 billion people that currently lack access to basic energy services would increase global CO₂ emissions by less than 0.5 per cent, even if provided through fossil fuels, according to ETC Group (2008).

⁴⁶ See note 31.

⁴⁷ Stern, N. (2008) 'Key Elements of a Global Deal on Climate Change', London School of Economics and Political Science, www.lse.ac.uk/collections/granthamInstitute/publications/KeyElementsOfAGlobalDeal_30Apr08.pdf.

⁴⁸ Center for Clean Air Policy (2006) 'Clean Development Mechanism Dialogue Working Paper'.

⁴⁹ The NGO-backed Gold Standard is one very promising attempt to introduce such criteria, favouring renewable energy and energy-efficiency measures, and requiring the participation and consent of affected communities. See www.cdmgoldstandard.org.

⁵⁰ Baumert, K. and Winkler, H. (2005) 'SD-PAMs and international climate agreements', in Bradley, R., Baumert, K. and Pershing, J. (eds.), *Growing in the Greenhouse: Protecting the Climate by Putting Development First*, Washington DC: World Resources Institute.

⁵¹ Government of the Philippines on behalf of the Group of 77 and China (2008) Submission to the UNFCCC, 25 August 2008.

⁵² European Parliament (2008) 'The EU's Emission Reduction Target, Intended Use of CDM and its +2°C'.

⁵³ See note 37.

⁵⁴ Oxfam would in particular warn against forcing the creation of 'enabling environments' onto developing countries and thus reducing the policy space these countries need for a dedicated sustainable-development and poverty-eradication agenda, especially where these priorities are in conflict with profit interests of foreign companies and investors.

⁵⁵ As for example proposed by the European Union, Bonn 2008. See http://unfccc.int/files/adaptation/application/pdf/eu_awgcla2_adaptation_workshop.pdf

⁵⁶ See note 2.

⁵⁷ Oxfam (2008) 'The Way Forward: A Roadmap for Financing Adaptation', Oxford: Oxfam.

⁵⁸ Estimates for possible revenues after 2012 are expected to reach at the very best \$5bn annually. See note 37.

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