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Human Development Report **2007/2008**

Fighting climate change:
Human solidarity in a divided world



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Foreword

What we do today about climate change has consequences that will last a century or more. The part of that change that is due to greenhouse gas emissions is not reversible in the foreseeable future. The heat trapping gases we send into the atmosphere in 2008 will stay there until 2108 and beyond. We are therefore making choices today that will affect our own lives, but even more so the lives of our children and grandchildren. This makes climate change different and more difficult than other policy challenges.

Climate change is now a scientifically established fact. The exact impact of greenhouse gas emission is not easy to forecast and there is a lot of uncertainty in the science when it comes to predictive capability. But we now know enough to recognize that there are large risks, potentially catastrophic ones, including the melting of ice-sheets on Greenland and the West Antarctic (which would place many countries under water) and changes in the course of the Gulf Stream that would bring about drastic climatic changes.

Prudence and care about the future of our children and their children requires that we act now. This is a form of insurance against possibly very large losses. The fact that we do not know the probability of such losses or their likely exact timing is not an argument for not taking insurance. We know the danger exists. We know the damage caused by greenhouse gas emissions is irreversible for a long time. We know it is growing with every day of inaction.

Even if we were living in a world where all people had the same standard of living and were impacted by climate change in the same way, we would still have to act. If the world were a single country, with its citizens all enjoying similar income levels and all exposed more or less to the same effects of climate change, the threat of global warming could still lead to substantial damage to human well-being and prosperity by the end of this century.

In reality, the world is a heterogeneous place: people have unequal incomes and wealth and climate change will affect regions very differently. This is, for us, the most compelling reason to act rapidly. Climate change is already starting to affect some of the poorest and most vulnerable communities around the world. A worldwide average 3° centigrade increase (compared to preindustrial temperatures) over the coming decades would result in a range of localized increases that could reach twice as high in some locations. The effect that increased droughts, extreme weather events, tropical storms and sea level rises will have on large parts of Africa, on many small island states and coastal zones will be inflicted in our lifetimes. In terms of aggregate world GDP, these short term effects may not be large. But for some of the world's poorest people, the consequences could be apocalyptic.

In the long run climate change is a massive threat to human development and in some places it is already undermining the international community's efforts to reduce extreme poverty.

Violent conflicts, insufficient resources, lack of coordination and weak policies continue to slow down development progress, particularly in Africa. Nonetheless in many countries there have been real advances. For instance, Viet Nam has been able to halve poverty and achieve universal primary education way ahead of the 2015 target. Mozambique has also managed to significantly reduce poverty and increase school enrollment as well as improving the rates of child and maternal mortality.

This development progress is increasingly going to be hindered by climate change. So we must see the fight against poverty and the fight against the effects of climate change as interrelated efforts. They must reinforce each other and success must be achieved on both fronts jointly. Success will have to involve a great deal of adaptation, because climate change is still going to affect the poorest countries significantly even if serious efforts to reduce emissions start immediately. Countries will need to develop their own adaptation plans but the international community will need to assist them.

Responding to that challenge and to the urgent request from leaders in developing countries, particularly in sub-Saharan Africa, UNEP and UNDP launched a partnership in Nairobi during the last climate convention in November 2006. The two agencies committed to provide assistance in reducing vulnerability and building the capacity of developing countries to more widely reap the benefits of the Clean Development Mechanism (CDM) in areas such as the development of cleaner and renewable energies, climate proofing and fuel-switching schemes.

This partnership, that will enable the UN system to act promptly in response to the needs of governments trying to factor in climate-change impacts into their investment decisions, constitutes a living proof of the United Nation's determination to 'deliver as One' on the climate change challenge. For example, we can help countries improve existing infrastructure to enable people to cope with increased flooding and more frequent and severe extreme weather events. More weather resistant crops could also be developed.

While we pursue adaptation we must start to reduce emissions and take other steps at mitigation so that the irreversible changes already underway are not further amplified over the next few decades. If mitigation does not start in earnest right now, the cost of adaptation twenty or thirty years from now will become prohibitive for the poorest countries.

Stabilizing greenhouse emissions to limit climate change is a worthwhile insurance strategy for the world as a whole, including the richest countries, and it is an essential part of our overall fight against poverty and for the Millennium Development Goals. This dual purpose of climate policies should make them a priority for leaders around the world.

But having established the need for limiting future climate change and for helping the most vulnerable adapt to what is unavoidable, one has to move on and identify the nature of the policies that will help us get the results we seek.

Several things can be said at the outset: First, non-marginal changes are needed, given the path the world is on. We need big changes and ambitious new policies.

Second, there will be significant short term costs. We have to invest in limiting climate change. There will be large net benefits over time, but at the beginning, like with every investment, we must be willing to incur the costs. This will be a challenge for democratic governance: political systems will have to agree to pay the early costs to reap the long term gains. Leadership will require looking beyond electoral cycles.

We are not too pessimistic. In the fight against the much higher inflation rates of the distant past, democracies did come up with the institutions such as more autonomous central banks and policy pre-commitments that allowed much lower inflation to be achieved despite the short term temptations of resorting to the printing press. The same has to happen with climate and the environment: societies will have to pre-commit and forego short term gratification for longer-term well being.

We would like to add that while the transition to climate protecting energy and life styles will have short term cost, there may be eco-

nomic benefits beyond what is achieved by stabilizing temperatures. These benefits are likely to be realized through Keynesian and Schumpeterian mechanisms with new incentives for massive investment stimulating overall demand and creative destruction leading to innovation and productivity jumps in a wide array of sectors. It is impossible to quantitatively predict how large these effects will be but taking them into account could lead to higher benefit-cost ratios for good climate policies.

The design of good policies will have to be mindful of the danger of excessive reliance on bureaucratic controls. While government leadership is going to be essential in correcting the huge externality that is climate change, markets and prices will have to be put to work, so that private sector decisions can lead more naturally to optimal investment and production decisions.

Carbon and carbon equivalent gases have to be priced so that using them reflects their true social cost. This should be the essence of mitigation policy. The world has spent decades getting rid of quantity restrictions in many domains, not least foreign trade. This is not the time to come back to a system of massive quotas and bureaucratic controls because of climate change. Emission targets and energy efficiency targets have an important role to play but it is the price system that has to make it easier to achieve our goals. This will require a much deeper dialogue between economists and climate scientists as well as environmentalists than what we have seen so far. We do hope that this Human Development Report will contribute to such a dialogue.

The most difficult policy challenges will relate to distribution. While there is potential catastrophic risk for everyone, the short and medium-term distribution of the costs and benefits will be far from uniform. The distributional challenge is made particularly difficult because those who have largely caused the problem—the rich countries—are not going to be those who suffer the most in the short term. It is the poorest who did not and still are not contributing significantly to green house gas emissions that are the most vulnerable. In between, many middle income countries are becoming significant emitters in aggregate terms—but they do not have the carbon debt to the world that the rich countries have accumulated and they are still low emitters in per capita terms. We must find an ethically and politically acceptable path that allows us to start—to move forward even if there remains much disagreement on the long term sharing of the burdens and benefits. We should not allow distributional disagreements to block the way forward just as we cannot afford to wait for full certainty on the exact path climate change is likely to take before we start acting. Here too we hope this Human Development Report will facilitate the debate and allow the journey to start.



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Kevin Watkins
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Human Development Report 2007/2008

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