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Sustainable Development in a Changing Climate

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International Development Committee

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Summary

Climate change threatens to destroy gains made in poverty reduction in many developing countries. In Africa changing rainfall patterns are already affecting food production and rising temperatures are increasing exposure to malaria. The impacts of these changes are felt most by the poorest people who have done least to cause them.

Substantial funding will be needed to help poor countries tackle climate change. This funding must be additional to pledges already made for development assistance because developing countries are not responsible for the emissions which have caused climate change and the estimated costs cannot be met from existing development assistance or national budgets. The Government should make clear that it stands by the principle of new, additional and predictable funding support for climate change responses in developing countries.

There is a danger that the current economic crisis could derail efforts to tackle climate change and increase the risks it poses for developing countries. On the other hand, it could provide an opportunity to chart a new "greener" growth strategy in developing countries if the right approach is adopted and the necessary funding is forthcoming.

Climate change should be central to the Department for International Development's (DFID's) work in developing countries. However, we found that limited progress had been made on ensuring that climate change informs all policy decisions ("mainstreaming"). There are a number of welcome initiatives and new projects but DFID must now move on from discrete projects to establish comprehensive climate change programmes.

Poverty can lead to resource degradation and hinder appropriate and timely responses to climate change impacts. Sustainable management of the natural resource base upon which many poor people depend for their livelihoods is therefore vital. DFID has recently renewed its focus on water resources management. It should now consider the creation of marine and forestry management strategies to ensure that these sectors can continue to contribute to economic growth, in a sustainable manner, for the benefit of current and future generations.

Developed countries should ensure that actions taken to reduce emissions do not impact negatively on developing countries. While aviation emissions must be tackled, this should be done in a way that at least does no harm to developing countries. Tourism and export horticulture are important contributors to poverty reduction in many poor countries. These sectors should be supported to increase their pro-poor benefits and reduce their climate change impact.

DFID has identified low carbon development as a priority area in its White Paper consultation. There is a pressing need for more research into low carbon options which are appropriate for poor countries and for mechanisms to facilitate knowledge and technology transfer. DFID should ensure that this is a focus for its new Centre for Climate and Development. However, emphasis on low carbon development should not displace efforts to meet the basic energy needs of the poorest people.

In December 2009 the Parties to the UN Framework Convention on Climate Change will meet in Copenhagen with the aim of finalising the framework for a new agreement on climate change for the post-2012 period. The conference needs to secure international agreement on ambitious emissions reduction targets and substantial funding to assist developing countries in responding to climate change. These objectives should be central to the positions the Government adopts in advance of the conference.

Much of the impact of climate change could be reduced by strong mitigation efforts. Conversely, delayed or lesser emissions reductions will significantly constrain the opportunities to achieve lower stabilisation levels and increase the risk of more severe climate change impacts. Action is therefore needed now on emissions reductions. The UK should show strong leadership and commit to setting and meeting more stringent emissions reductions targets.

Urgent action is needed on adaptation to avoid consigning developing countries to greater poverty and hardship. Providing finance to help developing countries adapt has been slow and very little has gone to Africa. Agreement will not be reached in Copenhagen unless developed countries accept their responsibility to provide new and adequate funding to poor countries to help them respond to climate change. The UK must make clear its commitment to this ahead of the Copenhagen summit, and should encourage the multilateral agencies it supports to do the same.

1 The Inquiry

1. Climate change threatens to destroy gains made in poverty reduction in many developing countries. In Africa climate change is already causing increased flooding and droughts, shifting rainfall patterns, more extreme weather and unpredictable seasons. These changes have the potential to destroy villages and towns, reduce agricultural productivity, spread disease and push the most vulnerable people further into poverty as they struggle to find water, feed themselves, or move to new, more secure locations. Lord Stern emphasised the importance of ensuring that climate change was not allowed to undermine poverty reduction objectives:

> The two big challenges of this century are the fight against world poverty and the management of climate change, and they are inextricably interlinked. If we fail to manage climate change, we will undermine development very drastically, and if we try to put forward a programme for the management of climate change which is seen to, or does, undermine the prospects of fighting poverty over the next 20 or 30 years, we will not succeed in gathering the coalition that we have to and neither would we deserve to succeed.[1]

2. There is also a risk that the current economic crisis could derail efforts to tackle climate change and further increase the risks to developing countries. As we have explored in our separate report on *Aid Under Pressure,* the current economic downturn could push 90 million more people into extreme poverty by the end of 2010.[2] Developing countries are already feeling the impacts which include: people eating less nutritious food and eating less frequently; and increased domestic and ethnic violence, crime and drug abuse.[3] The world's poorest people are therefore facing the dual threats of a changing climate and increased economic uncertainty.

3. In this context we decided to examine how DFID is seeking to assist developing countries to manage the impact of climate change while continuing to make progress on poverty reduction objectives. Economic development is often dependent on natural resources which are finite or threatened. DFID's approach must therefore also ensure that development today is consistent with maintaining the supply of resources for future generations. This is the concept of "sustainable development", described in the report of the Bruntland Commission, *Our Common Future*, in 1987[4] and now enshrined in Millennium Development Goal 7—ensuring environmental sustainability. The Goal's first target is to integrate the principles of sustainable development into country policies and programmes.[5]

1 Q 200

2 Fourth Report of Session 2008-09, *Aid Under Pressure: Support for Development Assistance in a Global Economic Downturn* , HC 179-II. See oral evidence taken on 22 April 2009, Q 239

3 DFID, *Latest research shows impact of recent crises on poor communities*, 15 April 2009

4 The Bruntland Commission defined sustainable development as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs." UN, *Our Common Future*, Report of the World Commission on Environment and Development, 1987

5 UNDP, Millennium Development Goals, www.undp.org/mdg/goal7.shtml

4. The Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC) is due to take place in Copenhagen in December. Its aim is to reach agreement on how the international community will tackle climate change after 2012. The extent to which the needs of poor countries are addressed in any new agreement is key to their future development and security. The UK, as an acknowledged global leader in development, has an important role to play in ensuring that the particular needs of poor countries are addressed at the Conference and that these countries are supported to make a clear case for assistance in tackling climate change.

5. It therefore seemed timely for us to assess the effectiveness and coherence of the UK Government's approach to sustainable development; the extent to which climate change is integrated into DFID's work, including mitigation and adaptation measures; and the prospects at the Copenhagen Conference for progress on measures to tackle the impact of climate change on poor countries. We have also used the aviation sector as a case study to assess the extent to which mitigation measures taken by the rich world may have an adverse impact of the economies of poor countries and what might be done to address this.

6. We announced our inquiry in October 2008. We received evidence from 26 organisations and individuals including the UK Government, non-governmental organisations (NGOs), academics, consultancies and the private sector. We held five evidence sessions between January and April 2009. We are grateful to all those who took the time to engage with our inquiry. We are also grateful for the assistance provided by our two specialist advisers, Professor Thomas E Downing of the Stockholm Environment Institute and Dr Benito Müller of the Oxford Institute for Energy Studies.[6]

7. As part of the inquiry, we visited Kenya and Tanzania in March 2009 to observe the challenges faced by those already dealing with a less predictable and harsher climate. In Kenya, our focus was on livelihoods and horticulture. We visited a flower farm whose carbon emissions were six times lower than its Dutch equivalent. We travelled to North Horr, in the arid lands of Northern Kenya, to see projects aimed at improving access to water, food and livelihoods in the context of an increasingly unpredictable climate. We discussed climate change in Nairobi with academics, NGOs, and research institutes. In Tanzania we focused on the contribution the tourism sector makes to economic growth and on the involvement of local communities in the protection of natural resources. In Arusha, we visited the National Park to observe how tourism and conservation could be jointly pursued and discussed the impact of the economic downturn on tourism revenues with many people working in the sector. We went to Kilwa in the southern coastal area to look at livelihoods projects. In Dar es Salaam we met representatives of the Tanzanian government, NGOs and other donors. The full itinerary of our visit is set out in the Annex. We are grateful to the DFID offices in Kenya and Tanzania for facilitating our visit and to all those who contributed to our programme.

6 Specialist Advisers are required to declare interests which are relevant to the inquiry. Dr Müller declared a relevant interest in that he is the joint coordinator of a Climate Strategies project on the Clean Development Mechanism, which is part-funded by the Department for International Development.

DFID's 2009 White Paper

8. In January 2009 the Secretary of State told us that DFID would be publishing a new White Paper later this year.[7] A consultation document was released in March which asked four broad questions:

- How can we support countries to minimise the impact of the economic downturn on the poor?
- How can we build a low carbon and climate resilient world?
- How can we create a safer world and the right conditions for poverty reduction in fragile and conflict-affected countries?
- How can the international financial institutions be reformed to deliver development?[8]

9. We decided that we needed to reflect the priority DFID has given to climate change in the new White Paper by ensuring that our report on these issues was published in time to inform the consultation process. As a result, our inquiry has had to be compressed and we have not had time to address all the issues which we originally set out to examine. We expect, however, to return to this subject when the outcomes of the Copenhagen summit in December are known.

10. Our recent report on *Aid Under Pressure* represents our contribution to the debate on two of the other White Paper questions: cushioning the impact of the downturn on the poor; and reform of the international financial institutions.[9] The issue of fragile and conflict-affected states has been addressed in a number of our previous reports, most recently on the *Humanitarian and Development Situation in the Occupied Palestinian Territories*, *Reconstructing Afghanistan* and *Conflict and Development.*[10] The conclusions and recommendations set out in these reports remain relevant to DFID's consultation.

Structure of the Report

11. The introduction in Chapter 2 assesses DFID's work to date on climate change in the context of the forthcoming Copenhagen conference. Chapter 3 explores the implications of climate change for development policy and practice and what more should be done to ensure that poor countries have the finance, knowledge and capacity to respond appropriately. Chapter 4 assesses the potentially negative impact which climate change response measures adopted by developed countries, specifically in relation to aviation emissions, may have on developing countries. Chapter 5 explores how DFID can best

7 Fourth Report of Session 2008-09, *Aid Under Pressure: Support for Development Assistance in a Global Economic Downturn* , HC 179-II. See oral evidence taken on 21 January 2009, Q 19.

8 DFID, *Eliminating World Poverty: Assuring our Common Future: A consultation document*, March 2009

9 Fourth Report of Session 2008-09, *Aid Under Pressure: Support for Development Assistance in a Global Economic Downturn*, HC 179

10 International Development Committee, Eleventh Report of Session 2007-2008, *The Humanitarian and Development Situation in the Occupied Palestinian Territories*, HC 522; Fourth Report of Session 2007-2008, *Reconstructing Afghanistan*, HC 65;and Sixth Report of Session 2005-2006, *Conflict and Development: Peacebuilding and Post-conflict Reconstruction*, HC 923

promote low carbon development while ensuring that the energy needs of the poorest are still met. Chapter 6 assesses the prospects for a “development friendly” outcome at the Copenhagen conference and the role which DFID might play in helping to ensure this.

2 Introduction

DFID's approach to sustainable development and climate change

Progress since 2002

12. In 2002 the previous International Development Committee published a report on *Global Climate Change and Sustainable Development.*[11] It found that tackling the risks posed by climate change in developing countries was not integrated into poverty reduction strategies. While DFID's policies to reduce poverty and build capacity had helped to reduce vulnerability to climate change, this was an indirect outcome rather than a stated objective. The report recommended, amongst other things, that DFID seek to integrate (or "mainstream") climate change objectives into its work in developing countries. It also noted that climate change and sustainable development were interdependent: any new framework for tackling climate change should aim to ensure that development was sustainable, and that progress towards sustainable development took account of climate change. The report recommended that DFID's policies reflect this necessary interaction.[12]

13. In its response to the report the Government said it was "working hard to ensure that environmental issues are effectively included (mainstreamed) into nationally owned processes of poverty eradication such as Poverty Reduction Strategy Papers" and that "the most important response to climate change and variability is to build the resilience of communities and their livelihoods to shocks of which climate is just one."[13] DFID believed that its mainstreaming agenda was the best way to bring together the development and climate change agendas.[14]

14. DFID's Departmental Strategic Objectives (DSO) now include promoting climate change mitigation and adaptation and ensuring environmental sustainability as part of its contribution to meeting MDG 7. DFID told us that measures towards achieving this Objective had been incorporated into its programme including:

- Initiatives on rural livelihoods, for example in India;
- Support for better management of environmental resources such as water, forests, fisheries and land;
- Voluntary codes of conduct such as the Extractive Industries Transparency Initiative (EITI) which helps to ensure greater transparency in the allocation of resources from natural resource extraction.[15]

11 Third Report of Session 2001-02, *Global Climate Change and Sustainable Development*, HC 519

12 Third Report of Session 2001-02, *Global Climate Change and Sustainable Development*, HC 519, para 99

13 Fourth Special Report of Session 2001-02, *Global Climate Change and Sustainable Development: Government Response to the Committee's Third Report of Session 2001-02*, HC 1270

14 *Ibid* para 7.1

15 Ev 73, 74

15. We asked DFID what progress it had made on integrating climate change into its country programmes since 2002. One example DFID provided was its support to Bangladesh to develop a 10 year Climate Change Strategy, which now influenced DFID's development programme in the country.[16] Bangladesh is one of the most disaster-prone countries in the world and at severe risk of flooding from climate change. DFID's work there includes constructing houses on raised platforms, building flood and cyclone shelters and providing training on climate resilient livelihoods.[17] DFID told us it had also piloted a climate vulnerability screening process in Bangladesh which would take account of the risks posed by climate change to its projects.[18] Evidence of progress in mainstreaming climate change elsewhere in DFID country programmes was more patchy and the Minister was not able to give us any specific examples of how this had been taken forward with African countries.[19]

16. **We are disappointed that DFID could not provide us with more evidence of progress it has made since 2002 towards fully integrating climate change into its poverty alleviation programmes, especially in Africa. DFID's programme in Bangladesh, which seeks to combine climate change and development objectives in practical ways, its pilot climate screening project and its assistance to the government to develop a Climate Change Strategy are steps in the right direction. At present, however, they appear to be one-off projects rather than clear evidence of a mainstreamed approach. We believe that such initiatives should become the norm throughout DFID's country programmes. The Department should be able to demonstrate much more clearly that climate change is informing its policy decisions in all the countries in which it works. We invite the Secretary of State, in responding to this Report, to set out the steps planned to achieve this.**

Sustainable development

17. DFID told us that it had a longstanding commitment to the environment and sustainable development. It had "integrated the principles of sustainable development across a broad range of DFID's work including governance and building effective states, conflict prevention, and promoting sustainable growth."[20] This commitment to sustainable development is set out in DFID's Sustainable Development Action Plan which forms part of the Government's Sustainable Development Strategy.[21] The Plan states that DFID will embed sustainable development in all its policies and programmes, balance the economic, social and environmental aspects of its work in-country and ensure that it meets its commitments to UK targets and that developing countries benefit from this.[22]

18. However some have questioned the depth of this commitment. The International Institute for Environment and Development (IIED) told us that DFID was not seen as a

16 Ev 87

17 Ev 87; Q 224

18 Ev 87; Q 226. DFID already carries out environmental screening on all projects over £1 million.

19 Q 226

20 Ev 72

21 Ev 73

22 DFID, *2007/08 Sustainable Development Action Plan*, June 2007

lead player on sustainable development, and that it tended to focus on the economic dimensions of sustainable development:

> In practice, DFID interprets sustainable development in terms of sustained economic growth, rather than the integration of economic, social and environmental objectives where possible, and informed trade-offs where integration is not possible.[23]

Simon Anderson of IIED explained that DFID's engagement with poverty reduction strategies in developing countries put very little emphasis on the integration of the environmental causes of poverty. However, more positively, one recent DFID initiative with the Government of Tanzania had sought to ensure its Poverty Reduction Strategy took account of environmental concerns.[24] DFID highlighted this initiative in its evidence:

> In Tanzania, the UK has worked with UNDP [UN Development Programme] to help the Government better integrate environmental management in its National Strategy for Growth and Poverty Reduction. Assistance included developing poverty environment indicators as part of the Strategy's poverty monitoring system and budgeting process, and work with key stakeholders in developing the strategy. As a result, 14% of targets across key areas of the strategy relate to environmental management, such as reducing land degradation, water pollution and loss of biodiversity. [25]

However, this appears to be a one-off initiative. Moreover the Strategy itself makes no mention of climate change adaptation or greenhouse gas emissions.[26]

19. IIED was also sceptical about the contribution made by the UK Sustainable Development Commission, the Government's independent advisory body on sustainable development. We were told that the Commission needed to be more engaged with international development activities, but that DFID had not taken the opportunity to encourage it in this direction.[27] The DFID Parliamentary Under-Secretary of State, Mike Foster, told us that the Department had limited engagement with the Sustainable Development Commission and that it was largely UK-focused.[28] Lord Hunt of Kings Heath, Minister of State for Sustainable Development and Energy Innovation, believed that the retirement of the current Chair of the Commission might provide an opportunity to reconsider its focus.[29] He undertook to review its work to date and discuss with DFID whether it should have a greater international focus.[30]

20. **We support the focus in DFID's Sustainable Development Action Plan on ensuring that sustainability is at the centre of the Department's development work and that**

23 Ev 117

24 Q 7

25 Ev 98

26 Government of Tanzania, *National Strategy for Growth and Reduction of Poverty*, June 2005, www.tanzania.go.tz/pdf/nsgrptext.pdf

27 Q 4

28 Q 239

29 Q 240

30 Q 241

development objectives are reflected in both domestic and international sustainability policies and programmes. We were, however, surprised that the Minister was unable to tell us more about how the Plan influenced DFID's work in practice. There is a need for greater coherence across Government on sustainable development. In an increasingly interdependent world DFID needs to work more closely with other Government Departments, particularly Business, Enterprise and Regulatory Reform, to increase their awareness of the international dimensions of sustainable development. The UK's Sustainable Development Commission has not been engaged meaningfully in international development issues and could contribute more in this area. It should have an international as well as a domestic focus. We welcome the commitment from the Minister of State for Sustainable Development to review the focus of the Commission. We request that the Government, in its response to this Report, provides an update on progress with this review.

Recent initiatives

21. Since our predecessors' 2002 report the evidence of climate change has increased significantly. The most recent assessment by the Intergovernmental Panel on Climate Change (IPCC) found that "warming of our climate system is unequivocal" and that much of this was due to increases in greenhouse gas (GHG) emissions resulting from human activity.[31] Lord Stern told us that there was an increasing awareness among policy-makers of the potentially catastrophic effects of climate change.[32] On our visit to Africa we were able to see that climate change was already having an impact on people's lives—changing rainfall patterns, for example, had led to crop failure in parts of Kenya and contributed to a serious food crisis.

22. DFID reports that climate change has caused it to adjust its approach to sustainable development and led to a greater level of cross-Departmental coordination. The objectives of this new approach are: to play a leadership role internationally on climate change negotiations to ensure that any new agreement is "development friendly"; to help protect the most vulnerable from the inevitable impacts of climate change; and to renew its emphasis on environmental management and sustainable development.[33]

23. The main elements of DFID's work towards achieving these objectives are:

- Investment of an extra £100 million into research on climate change over the next five years;
- "Cascading" climate change objectives through its planning and monitoring tools;
- The development of a tool for assessing climate risks to DFID programmes which has been used in four of its country programmes to date;

31 IPCC, *Climate Change 2007: Synthesis Report*. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC, Geneva, Switzerland; Diana Liverman, "From uncertain to unequivocal, the IPCC Working Group Report", *Environment*, vol 49 no 8, October 2007.

32 Q 216

33 Ev 71

- The establishment of a Climate and Environment Group within its Policy and Research Division and the appointment of 11 new climate advisers in country offices;
- Assistance to set up the World Bank-managed Climate Investment Funds (CIF) accompanied by funding of £400 million over 3 years.[34]

In addition DFID told us that it was launching a new initiative within the Department called *Making DFID Climate Smart*. This would:

> […] integrate thinking about low carbon and climate-resilient development throughout the work of the department […] ensure that DFID has the right resources, systems and communications in place to deliver on climate change and that DFID staff systematically make the link between climate change, sustainable development and poverty reduction.[35]

These are all recent initiatives and their success has not been reviewed. We will assess their likely impact in this report.

The UNFCCC in Copenhagen

24. DFID's recent initiatives have been adopted in the context of increasing international attention on and efforts to respond to climate change. In December 2009 the Parties to the UN Framework Convention on Climate Change (UNFCCC) will meet in Copenhagen with the aim of finalising the framework for a new agreement on climate change for the post-2012 period when the existing Kyoto Protocol expires. The Protocol, agreed in 1997, set binding emissions reductions targets for developed countries (referred to as Annex 1 countries) who have a heavier burden of responsibility placed on them under the principle of "common but differentiated responsibilities." Other signatories do not have mandatory targets.

25. As the evidence of climate change has increased there has been pressure for developed countries to adopt more ambitious emissions reductions targets in any new agreement. The fourth report of the Intergovernmental Panel on Climate Change (IPCC) recommended that any further increase in global average temperatures above pre-industrial levels needed to stay well below 2˚C to avoid the worst impacts of climate change.[36] To achieve this, atmospheric greenhouse gas concentrations must almost certainly be limited below 550 ppm (parts per million; they are currently 384 ppm).[37]

26. This would mean that global greenhouse gas emissions, which are currently rising at around 1% per year, would need to peak by 2015 and then be reduced by 80% by 2050,

34 The contribution to the CIF is from the DFID-DECC jointly funded and managed £800 million Environmental Transformation Fund (ETF) under the international window.

35 Ev 77

36 IPCC, *Climate Change 2007: Synthesis Report*. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the IPCC, Geneva, Switzerland

37 Carbon Dioxide Information and Analysis Centre: http://cdiac.ornl.gov/pns/current_ghg.html (December 2008 update)

compared to 1990 levels.[38] This emissions reduction scenario would require developed countries to reduce emissions by 25-40% by 2020 and 80-95% by 2050. Developing countries will have to emit less than they might otherwise have done (although emissions in the rapidly industrialising countries, particularly China, will continue to rise sharply in the shorter term before they start to fall). Even so, reducing emissions by these amounts will provide only a 50% chance of avoiding dangerous climate change. Building in greater certainty would require more stringent and earlier reductions.

27. The UK's Climate Change Act received Royal Assent in November 2008. It sets out a framework for the UK "to achieve its long-term goals of reducing greenhouse gas emissions and to ensure steps are taken towards adapting to the impacts of climate change." The long term target is to reduce greenhouse gas emissions by 80% against 1990 levels by 2050.[39] The 2009 Budget committed the UK to 34% cuts by 2020. The Government said that the targets would rise by an unspecified amount if there is a "satisfactory" global agreement on climate change at Copenhagen.[40] The 34% target is in line with recommendations made by the UK Committee on Climate Change although it falls short of the Committee's suggested rise to 42% if there is a successful agreement in Copenhagen.[41] The EU has agreed to cut its overall emissions by 20% by 2020 and to increase this to 30% subject to commitments from other developed countries in an international agreement.[42] The US has so far committed to return its emissions to 1990 levels by 2020.[43] Congress will shortly consider a draft climate bill which includes a provision to reduce greenhouse gas emissions by 17% against 2005 levels by 2020.[44]

28. Many of the impacts of climate change could be reduced by strong mitigation efforts. Conversely, delayed or lesser emission reductions will significantly constrain the opportunities to achieve lower stabilisation levels and increase the risk of more severe climate change impacts. As DFID notes, "a failure to achieve an ambitious goal would be a terrible outcome for developing countries: a significant rise in temperatures would lead to even greater costs in terms of adaptation."[45] Thus agreement on mitigation targets is directly linked to adaptation in developing countries—greater mitigation ensures adaptation could be effective; if mitigation targets are too weak, the impacts of climate change are likely to be very expensive.

29. The UNFCCC Copenhagen conference will also discuss: measures, including funding, to help developing countries adapt to climate change; developing country mitigation actions including avoided deforestation; and assistance with technology. The meeting in Copenhagen is thus a significant one for the UK Government and the international

38 Ev 187

39 Climate Change Act 2008, explanatory notes.

40 "Budget 2009: Chancellor promises to cut emissions by 34% by 2020 with carbon budgets", *The Guardian*, 22 April 2009

41 Committee on Climate Change, *Building a low carbon economy – the UK's contribution to tackling climate change*, 1 December 2008, www.theccc.org.uk. The Committee on Climate Change is the Non-Departmental Public Body which advises the Government on its carbon budget under the Climate Change Act 2008.

42 Q 242

43 "US to be pragmatic on climate," BBC news on-line, 3 April 2009

44 "Barack Obama's US climate bill seen as a step forward", *The Guardian*, 15 May 2009.

45 Ev 78

community. **We are encouraged by the Government's strong position on emissions reductions adopted in the lead-up to the UN Framework Convention on Climate Change conference in December. We believe that this will provide greater leverage in encouraging other industrialised countries to make similar commitments. It is, however, critically important that the UK makes progress towards meeting its own targets. Failure to do so risks not only dangerous climate change but might well also undermine global resolve to tackle the problem.**

30. DFID has said that one of its priorities is to play a leadership role in international climate change negotiations and to ensure that any new agreement is "development friendly."[46] The Department also has a role to play in encouraging developing countries to reduce their emissions levels. We will discuss the UK Government's objectives for the Copenhagen conference in chapter 6.

46 Ev 76

3 Poverty, natural resources and adaptation

31. Climate adaptation refers to the process of "adjustment of natural or human eco-systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities."[47] DFID notes that "such actions should ultimately enhance resilience or reduce vulnerability to actual or expected climate change."[48] Adaptation is thus an ongoing process of development and change in response to new, potentially more hostile, climatic conditions. One of the enabling conditions for development and climate adaptation which is often ignored is the natural resource base upon which livelihoods depend. This chapter looks at the links between development and climate change including natural resource management, pro-poor economic development and climate resilience. It also examines the need for additional finance to help pay for climate change adaptation in developing countries.

Linking climate change and development

32. Millennium Development Goal 7—ensuring environmental sustainability—under-scores the strong links between development and the environment. Climate change makes this linkage even more significant. As our predecessors said: with climate change, vulnerability and impacts are changing and often putting poor people at greater risk.[49] The 2008 UNDP Human Development Report stresses this link:

> Climate change will undermine international efforts to combat poverty. […] Looking to the future, the danger is that it will stall and then reverse progress built up over generations not just in cutting extreme poverty, but in health, nutrition, education and other areas.[50]

33. Yet, as Simon Maxwell, former Director of the Overseas Development Institute (ODI) noted, there is often insufficient collaboration between the climate change and the development communities. He believed that climate change should have a high profile in all development programmes and that climate change experts should consult with development experts to increase understanding of the politics and institutional complexities of natural resource conservation.[51]

34. The IPCC's fourth assessment report set out many of the linkages between adaptation, mitigation and development. The chapter on adaptation and mitigation linkages produced an inventory of the major links while noting that not every action needs to support both.[52]

47 IPCC Glossary: www.ipcc.ch/pdf/glossary/ar4-wg2.pdf.

48 Ev 84

49 Third Report of Session 2001-02, *Global Climate Change and Sustainable Development*, HC 519

50 UNDP, *Fighting Climate Change, Human Development Report 2007/2008*, New York, 2007 p 1

51 Simon Maxwell, *A triple call on climate change*, ODI opinion, January 2009

52 Klein R J T et al, "Interrelationships between Adaptation and Mitigation", in Parry, M L. et al (Eds).*Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, (Cambridge 2007)

Stronger mitigation policies in the industrialised world will reduce the need for adaptation in developing countries. Policies on mitigation and adaptation should therefore not be developed in isolation.[53] IIED emphasised this point to us:

> Adaptation and mitigation—it is a false dichotomy […] If there are going to be trade-offs in the way the negotiations proceed, perhaps a better understanding of the way that mitigation and adaptation need to be linked into the future needs to happen.[54]

DFID has recently created a Climate and Environment Group in its Policy and Research Division and has brought in specialists from other Government Departments. These initiatives are an important starting point for ensuring the science of climate change informs development policy.

Policy coherence

35. It is not only development programmes which should take account of climate change. The impacts of climate change will cut across sectors and indeed regions. Policies on migration or trade, for example, can have direct implications for development and, increasingly, responses to climate change. World Development Movement (WDM) told us about a proposal for an open-cast coal mine in Bangladesh. The mine would displace more than 40,000 people. WDM pointed out that land in Bangladesh was already under pressure from climate change:

> Bangladesh is already one of the most densely populated countries in the world, with huge pressures on land. Rising sea-levels and increased flooding from climate change are and will make good quality land even scarcer. Atiq Rahman from the Bangladesh Centre for Advanced Studies, a lead author from the IPCC, has said that 35 million people could be displaced from Bangladesh coastal areas by 2050. In the face of climate change, it would be disastrous for local people to be displaced from the good quality land in Phulbari. [55]

WDM expressed concern that the UK Government appeared to be supporting this investment by a UK company without sufficient attention to the social and environmental implications of the proposal.[56]

36. We had discussions in Tanzania about the potential impact of a proposed soda-ash plant near Lake Natron which is the main breeding ground in east Africa for the lesser flamingo and one of only four breeding-sites in the world. On the face of it, the project would bring economic development to the area. But the economic benefits were likely to go mainly to the foreign owners, and few of the jobs created would be suitable for local people, while the plant threatened to destroy the fragile ecological balance in the area.

53 Ev 194

54 Q 27

55 Ev 177

56 Q 48

37. DFID told us that there had been a transformation across Government in response to climate change.[57] The creation of the Department for Energy and Climate Change, which will lead on international climate change negotiations provides one example of this. DFID also indicated that a number of official and ministerial-level working groups and boards had been set up to address aspects of international climate change and pointed to the Cross Whitehall Board for the Environmental Transformation Fund.[58]

38. **We welcome the creation of the Department for Energy and Climate Change. We expect it to improve the coherence of the Government's response to climate change. Addressing the impact of climate change in developing countries should not be viewed as the sole responsibility of DFID. Other Departments, such as Business, Enterprise and Regulatory Reform, the Home Office, and the Foreign and Commonwealth Office, have roles to play. There are important linkages which can be made between mitigation policies in the UK and adaptation policies in developing countries which a more coherent Government approach would strengthen.**

Development in a hostile climate

39. Beyond the next decade or so IPCC projections indicate that climate change adaptation will need to address increasingly serious climatic conditions. This will require fundamental changes in development practice. Lord Stern described adaptation to us as "development in a more hostile climate" and said that it would require a very significant increase in funding, a greater degree of natural resource management and improved development planning.[59] As DFID noted:

> Climate change is putting extra pressure on the sustainability of eco-systems and other natural resources that are already suffering the consequences of growing global demand driven by rising consumption and population growth. Climate change is exacerbating environmental degradation, further exposing the dependence of the poor on the natural environment and compromising their resilience and ability to adapt. Climate change impacts are likely to push greater numbers of people into poverty.[60]

40. The reality of current climatic stresses means that there is a very urgent requirement to act now to build up the resilience of communities to cope with the challenges of a changing climate. The International Livestock Research Institute (ILRI) in Kenya had begun a project to determine the impact of climate change on rangelands, crops and livestock in Kenya so as to determine future vulnerabilities amongst agro-pastoral populations. Improving the use of climate information, including seasonal climate forecasts and early warning systems, could ensure timely responses now which might safeguard against future impacts.

57 Ev 76

58 Q 236

59 Q 201

60 Ev 75

41. We saw evidence of the many ways in which a changing climate is already altering the lives of poor people and their prospects for the future when we were in Kenya and Tanzania. For example we heard of the movement of malarial mosquitoes to higher altitudes and changing precipitation patterns. However in neither country is climate change a prime focus for DFID. Nor was it apparent that climate change had been fully integrated into either DFID's programmes or into partner governments' approaches to poverty reduction.

42. As we have noted, in 2002 our predecessors said that effective "mainstreaming" of climate change into development programmes was necessary and that climate change should not be seen as simply an add-on to existing development programmes. Others have reinforced this point.[61] For example IIED commented:

> There is a great deal of overlap between the poorest people living in the poorest countries, and the communities and countries that are most vulnerable to climate change. Thus it is advisable to link the poverty eradication agenda with adaptation to climate change. This means investing in ways to 'mainstream' adaptation to climate change into regular development (or 'sustainable development') planning, policies, projects and programmes at country, region and global levels.[62]

43. "Mainstreaming" has been described as a socio-institutional process of incorporating the best available assessments of current vulnerability, trends in climatic hazards and resources, prospects for future climate change and its impacts and the range of adaptation strategies and actions into ongoing policy, strategy and operations.[63] DFID has told us about its initial work but it is not yet clear how it intends to learn from the relatively small number of case studies and projects it has funded to date, or how the lessons learned will be disseminated throughout its operations and to its development partners. **DFID should set out clearly how it intends to ensure that climate change forms an integral part of all its country programmes. In particular, greater clarity is needed on how DFID plans to scale up one-off projects which seek to build resilience amongst local communities and ensure lessons learned from them are communicated widely and acted upon.**

44. DFID is funding a five-year programme in Africa to help African researchers and policy-makers identify practical ways in which rural and urban populations can respond to climate change. This £24 million Climate Change Adaptation in Africa (CCAA) programme is a valuable contribution to assisting the development of local knowledge and capacity. DFID has also supported development of the African Climate Policy Centre and the Climate for Development in Africa Programme, set to get underway soon. It has also taken an early lead in supporting the development of the World Bank's Climate Investment Fund. It co-manages the Pilot Programme for Climate Resilience (PPCR) with DECC and the World Bank, an ambitious initiative to demonstrate climate resilience in

61 Alan Nicol and Nanki Kaur, *Climate change: Getting adaptation right*, ODI Opinion, December 2008; Schipper, E.L.F., Meeting at the crossroads?: Exploring the linkages between climate change adaptation and disaster risk reduction, *Climate & Development* 1 (2009) 16–30.

62 Ev 120

63 See www.weADAPT.org which also contains guidance, work-in-progress and tools for effective incorporation of climate adaptation in planning processes.

five to ten highly vulnerable countries.[64] It is intended that the lessons learned should guide future investments and inform the operation of international funds for adaptation.

45. Although support from the developed world is vital, ultimately responses to climate change are the concern and responsibility of the vulnerable populations themselves. Priorities for international action therefore need to be carefully worked out with developing countries. In Kenya we learned of efforts by civil society organisations to incorporate climate change and sustainable development into their work and link their activities with those of parliamentarians. A working group had been established, funded by the Association of European Parliamentarian for Africa (AWEPA), which was attempting to have a Climate Change Bill introduced into parliament. The Bill was intended to raise awareness of climate change issues in Kenya. Many Least Developed Countries now have National Adaptation Programmes of Action (NAPAs) which set out preliminary plans for priority adaptation actions. DFID has helped in the development of some of these although very few have been accompanied by funding.[65]

46. Sustaining national and multi-stakeholder dialogues and initiatives can be difficult. However reaching successful outcomes in development programmes and international strategies will require coordination between donors and international agencies, support in the key ministries—for example economic planning and environment—as well as engagement with civil society.

47. **We welcome DFID's support for initiatives such as the Climate Change Adaptation in Africa Programme and the Africa Climate Policy Centre which are making a valid contribution to African-led research. DFID should also be commended for its support for funding streams and pilot programmes which aim to promote climate resilience, although we note that it will be some time before these can be evaluated and built upon. The capacity of developing countries to tackle climate change needs to be strengthened through support for national and multi-stakeholder dialogues and for the further development of National Adaptation Programmes of Action. We request that DFID, in response to this Report, provides more information on how these key elements of its climate change work will be funded and taken forward.**

Economic growth and natural resource management

48. Simon Anderson of IIED told us that "it is not sufficient to say that good development will solve adaptation needs".[66] Whilst we agree that specific climate change measures are urgently needed, the promotion of secure livelihoods through economic growth remains a good basis for responding to climate change if we accept the definition of adaptation as "development in a more hostile climate".

49. In the arid lands in Kenya, populated largely by pastoralists, the climate was a key determinant of development options. We saw projects aimed at supporting livelihoods in a region faced with unpredictable and changing rainfall patterns. These included restoring

64 Ev 87

65 Ev 197; Q 70

66 Q 29

wells, propagating seedlings, providing advice on suitable crops and livestock, and irrigating farmland. In Tanzania we discussed ways in which economic growth strategies might take account of the natural resource base on which people's lives depended. We visited the coastal area of Kilwa and talked with local fishermen about the damage to their livelihoods caused by over-exploitation of stock and dynamite fishing, often carried out by those living outside the area. WWF was engaged in a project to involve local communities in ensuring marine resources were conserved while promoting more secure livelihoods. We talked with local people who depended for their livelihoods on forests whose sustainability was threatened by illegal logging. We were told that water resources, biodiversity, forests and agriculture faced significant pressures from current and future climate change. DFID is no longer directly involved in the fisheries or forestry sectors in Kenya or Tanzania although it was funding a number of the small-scale projects which we saw.

50. Better natural resource management is the foundation for much of climate adaptation. We reviewed water management most recently in our Report on *Sanitation and Water*. We noted that in Africa only 3% of renewable water resources are managed, compared to 40% in Asia.[67] In Kenya we learned that the country generally received overall levels of rainfall which could be sufficient to meet its needs if the necessary infrastructure was put in place to distribute it from wetter areas to water-stressed ones. DFID is now committed to integrating climate change into its work on water resources management.[68] However WWF and others pointed out that the value of natural resources is not taken into account in many donor projects.[69] Tearfund told us:

> DFID does need to take a sustainable resource management approach, so not looking at resources as prospects for exploitation but as something to be sustained and managed; and I think there should be increased community engagement. You develop better and more environmentally robust approaches when you have full community engagement on the projects' work.[70]

51. **Economic growth cannot be sustained unless it takes into account the proper value of the resources upon which it depends. Conservation and preservation of natural resources are therefore contributors to sustainable development. DFID has not been directly involved in the marine or forestry sectors for some time and yet they are vital to poverty reduction in some countries. We believe that the Department needs to begin to re-establish its engagement in them. DFID has a water resources management strategy. It should also now urgently consider developing marine and forestry management strategies. The potential for development in these sectors should also be included in the work of the new International Growth Centre.**

67 Sixth Report of Session 2006-07, *Sanitation and Water,* HC 126-I, para 53

68 Ev 90

69 Ev 192

70 Q 38

Funding adaptation

52. A major issue on which the success of the Copenhagen meeting will be judged by developing countries is whether commitments are given for additional finance by rich countries to meet the costs of climate change adaptation in poor countries. This is based on the premise that adaptation represents an imposed cost which developing countries would not have encountered had it not been for the historical and present emissions from developed countries.

53. Estimating the costs of climate change and adaptation and the subsequent benefits in avoided impacts is highly uncertain. Moreover different studies use different approaches which produce different results. Current estimates of the costs of adaptation range from US$4 to 37 billion annually from 2008 in the Stern Review to US$86 billion annually from 2015 estimated by UNDP. A group of 50 African states has recently put forward a figure of US$67 billion a year by 2020 to meet adaptation needs.[71]

54. Whatever estimate is used it is clear that very large sums will be needed for adaptation. Finance for this will come from a range of sources. It is likely that a large part of the costs of climate impacts and adaptation will be borne by individuals and households, by private companies and local organisations. Funding from multilateral agencies will also play a significant role. There are currently four main multilateral funding mechanisms for adaptation, three of which were established under the UNFCCC:

- the Least Developed Countries Fund (LDCF)
- the Special Climate Change Fund (SCCF)
- The Global Environment Facility (GEF) Trust Fund's Strategic Priority for Adaptation (SPA)

The LDCF, SCCF and SPA Trust Fund are all based on voluntary pledges and contributions from donors. All three are managed by the World Bank's Global Environmental Facility (GEF), the primary operating entity of the UNFCCC to date.[72] A further funding instrument, the Adaptation Fund, came out of the Kyoto Protocol and is funded by a 2% levy on the Clean Development Mechanism (CDM) (see Chapter 5).

55. Multilateral funds as currently established are highly unlikely to be able to meet the costs of adaptation. Even where funding has been pledged, receipt and disbursal rates have been slow. Norwegian Church Aid found that US$133 million has been received by the UNFCCC and only US$32 million disbursed, against a total pledge of US$283 million.[73] IIED notes that Africa has benefited least from adaptation funding so far.[74] A recent

71 "Developing nations will need £183 billion climate change cash", *The Herald*, 21 April 2009; "Africa says poor need billions to fight climate change", *Reuters*, 20 April 2009. The total figure of $267 billion includes $200 billion in mitigation investments.

72 IIED, *Adaptation and development assistance: some FAQs*, November 2008

73 Norwegian Church Aid, *Financing climate change adaptation in developing countries: current picture and future possibilities*, Norway, 2008, p 11

74 IIED, *Adaptation in Africa; the global failure to deliver on funding*, December 2008; Ev 115

calculation of UNFCCC, multilateral and bilateral funds for adaptation showed over US$3 billion in pledged funds but less than US$300 million actually spent.[75]

56. Lord Stern suggested that donor aid should increase to 1% of GDP to help pay for adaptation.[76] However there is as yet no indication that donors are willing to make this increased commitment. As our recent report on *Aid Under Pressure* made clear, many donors are failing to make progress towards the existing commitment to spend 0.7% of Gross National Income on development assistance by 2015.[77] The recent G20 summit, which achieved significant uplifts in the funding available for the international financial institutions, did not give much attention to climate change, preferring to leave any major decisions until the Copenhagen conference in December.[78]

Additionality

57. WWF has emphasised that funding for adaptation needs to be additional to existing aid commitments and has criticised DFID's approach to this:

> DFID needs to adopt a position on the nature of financing for climate change adaptation which is firmly rooted in the principle that the polluter pays. Initial trends indicate that some high-income countries are using already pledged Official Development Assistance (ODA) finance for the purpose of climate change financing. The UK was one of the first countries to do this even though it claims that the climate financing is additional. The financing was only additional to the ODA already budgeted in the Comprehensive Spending Review of 2008-11, but will still be counted towards the commitment to give 0.7% of GNP as ODA, in effect displacing mainstream development financing. Other countries see adaptation funding clearly as additional to their 0.7% ODA targets. The Dutch Development Minister Bert Koenders said at a joint event with DFID last year: "There is no time left. We have to be crystal clear. Adaptation costs should be additional on the basis of the principle the polluter pays."[79]

58. The Minister stressed the difficulty of separating climate change funding from development assistance when DFID was implementing integrated projects designed to assist adaptation at the same time as contributing to poverty reduction. He gave the example of DFID's work in villages in Bangladesh where homes were being raised to protect them against flooding and where villagers were also being given livelihoods assistance as part of the same project. He said that it was difficult to "separate out what is the benefit of the projects for the individuals concerned that is just climate-related."[80]

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75 *ODI and Heinrich Boell Foundation keep track of adaptation funds*. Synthesis of funds compiled by T E Downing. See www.climatechangefundsupdate.org/listing. These are total funds rather than the annual funding requirements referred to in paragraph 53.

76 Nicholas Stern, *The economic crisis and the two great challenges of the 21st century*, address to the DFID conference on Securing Our Common Future, 9 March 2009

77 Fourth Report of Session 2008-09, *Aid Under Pressure: Support for Development Assistance in a Global Economic Downturn* , HC 179-I, paras 83-90

78 G20 Summit final communiqué, 2 April 2009

79 Ev 194

80 Q 225

59. We acknowledge the difficulties in distinguishing between funding provided specifically for climate change measures and that which is given for development assistance.[81] DFID officials told us in July 2008 that: "There is no official policy yet as to whether in the long run we will count environmental expenditures as Official Development Assistance, and that is actually being considered by ministers at this time."[82] In April 2009 the Minister told us that the Government was still considering its response.[83] The OECD Development Assistance Committee (DAC) is responsible for defining what donors can count as official development assistance (ODA). The view of the DAC Chairman was that funding for developing countries which was not directly aimed at poverty reduction, including for climate change projects, should be additional to ODA.[84]

60. **Estimates of the cost of adaptation vary widely. Funding sources are currently inadequate and the implications of the global economic downturn for the availability of future funding have not yet been properly assessed. We believe DFID should make clear its own plans for expenditure on climate change measures and that it should encourage other donors to do the same, in advance of the Copenhagen conference in December.**

61. **We support Lord Stern's call for an increase in the percentage of gross national income which donors allocate to assistance to poor countries to fund adaptation. Adaptation represents an additional cost for developing countries which have made negligible contributions to greenhouse gas emissions. We believe that developed countries, who bear the greatest responsibility for climate change, should therefore provide new, additional and predictable financial flows to assist poor countries to tackle its impacts. DFID must take the lead on making clear its commitment to the principle that climate change funding will be additional to its existing pledges on official development assistance. The UK will then be in a strong position to exert pressure on the international community to adopt this approach.**

Administration and use of adaptation funding

62. Concern was expressed to us about whether existing climate adaptation funds are being used effectively. Some developing countries have highlighted the difficulty of accessing adaptation funds, in particular those managed by the Global Environment Facility (GEF) which carries a high burden of reporting and co-financing.[85] The World Development Movement reported that the G77 and China have stated that funds for mitigation and adaptation in developing countries should not have to go through the World Bank as this is a body "dominated by rich countries". They would prefer funds to be administered by the UNFCCC.[86] Christian Aid also expressed doubt about the World Bank taking the lead in administering adaptation funds, citing its poor record on environmental management and

81 Q 246

82 Second Report of Session 2008-09, *DFID Annual Report 2008*, HC 220-II, Q57

83 Q 262

84 Fourth Report of Session 2008-09, *Aid under Pressure: Support for Development Assistance in a Global Economic Downturn*, HC 179-II, Q 196

85 Benito Müller, *Climate of distrust: The 2006 Bonn Climate Change Adaptation Fund Negotiations,* Oxford Institute for Energy Studies, June 2006

86 Ev 183

community involvement in projects.[87] In our 2008 Report on *DFID and the World Bank,* whilst accepting that the Bank should integrate action on climate change into its overall programme of work, we cautioned against it becoming a "bank for the environment" as we believed this risked compromising its overriding poverty reduction objectives.[88]

63. Most of the UK's pledged funding for adaptation to date will come from the Environmental Transformation Fund (ETF). £800 million has been allocated from the ETF to the Climate Investment Funds (CIF) managed by the World Bank. This is significantly more than the UK contribution to the UNFCCC funds (£18.5 million). Christian Aid told us that it was concerned that DFID would not be able to monitor the allocation of funds properly under the CIF since it would not have a direct role in determining which projects received funding. Some countries, notably the Netherlands, had overcome this problem by ring-fencing their finance for specific types of projects but DFID had not pursued this option.[89]

64. DFID assured us that rigorous mechanisms were in place within Government to oversee the UK's contribution to the World Bank's Climate Investment Funds. A board of representatives of the key departments for the ETF had been established, which monitored and evaluated projects and took decisions on whether funding allocations should be in the form of grants or loans. Ministers made decisions on "top level strategic ambitions and objectives and on financing allocations". The day-to-day administration was carried out within a DFID secretariat which reported to the ETF board.[90]

65. **The Government has allocated £800 million from the Environmental Transformation Fund (ETF) to be used for climate change work as part of the World Bank's Climate Investment Funds. This is a substantial sum of money and it is important that the way it is spent is properly scrutinised to ensure that it is achieving its intended objectives. We request that, in response to this Report, DFID provides us with an evaluation of the use of this ETF expenditure to date, including how it is contributing to poverty reduction, and that this information is regularly updated.**

66. A major milestone in achieving effective funding for adaptation would be the establishment of mechanisms to ensure that funds reach the people who need them most. Large amounts of development funding go through partner country governments. National finance ministries are then responsible for their allocation to target populations, sectors and regions. There are risks that funding intended for adaptation could end up in the wrong place and equally, if there is a shortfall, that funds intended for health care end up protecting forests for example.

67. **Donors cannot and should not manage developing country government budgets. It is, however, important that donors work with partner governments to establish mechanisms which would help to provide greater certainty that the large sums of money allocated for adaptation to climate change are used effectively for this purpose.**

87 Qq 38-40

88 Sixth Report of Session 2007-08, *DFID and the World Bank,* HC 67-I, para 106

89 Q 74

90 Qq 236-237

We believe DFID should apply the same rigour to this as it seeks to put in place for development assistance expenditure. We request that, in response to this Report, DFID provides further information on the monitoring and evaluation mechanisms which it has or plans to put in place to ensure that adaptation funding is used for its intended purposes.

4 Aviation emissions

68. Public-awareness has increased of the personal responsibility we all have to contribute to a reduction in global carbon emissions. Although this is a positive development, we were concerned that lifestyle decisions taken by individuals in rich countries with the aim of reducing their "carbon footprint" might have a detrimental impact on economic growth in some poor countries. We used aviation emissions as a case study to examine this issue.

69. According to the Stern Review, air transport is currently responsible for less than 2% of global emissions, shared roughly equally between domestic and international air transport. It notes that:

> By 2050, CO_2 emissions from aviation are expected to account for 2.5% of global greenhouse gas emissions. However taking into account the non-CO_2 effects of aviation would mean that it would account for around 5% of the total warming effect (radiative forcing) in 2050.[91]

Assuming EU projections that global emissions will have to be reduced to 50% below 1990 levels by 2050,[92] unrestricted international aviation emissions alone would make up 7% of the global permissible emissions cap in 2050 (before taking into account their warming effect on the global atmosphere which will require additional emissions reductions). It is therefore essential that aviation emissions are addressed in any new international agreement on climate change.

70. We recognise that measures to reduce aviation emissions—known as response measures—could have significant negative impacts on tourism and the export of horticultural produce which are vital sectors in many developing countries. The degree of impact very much depends on the sort of measures which are adopted to meet the need for mitigation.

Response measures

71. One way of reducing aviation emissions would of course be to reduce the number of flights. We explored the use of air transport duties to influence passenger decisions about whether or not to fly. The New Economics Foundation (NEF) argued that the UK's Airline Passenger Duty which is currently paid on all flights departing from the UK, is insufficient to act as a deterrent to flying and that the only realistic option is to set it at a sufficiently high level to reduce demand significantly.[93] The Ministry of Tourism in Tanzania told us it was alarmed by this prospect, warning that an increase in Airline Passenger Duty on long-haul flights from the UK would have a detrimental effect on its tourism industry. NEF told us that it was important, when setting air duty levels, to distinguish between short and

91 Stern Review, *The Economics of Climate Change*, 2006, Annex 7c Emissions from the transport sector

92 European Commission, *Towards a comprehensive climate change agreement in Copenhagen*, COM(2009) 39 final, Brussels: 28.1.2009

93 NEF, *Plane Truths: Do the economic arguments for aviation growth really fly?* 2008

long-haul flights mainly because there are less carbon-intensive alternatives to short-haul flights.[94]

72. The extent to which demand is reduced by increased taxes depends on the sensitivity of travellers to price—the elasticity of demand. An academic study found that there was a considerable variance in elasticities of air travel demand, with long-haul business travel highly inelastic, while short-haul leisure travel was quite sensitive to price.[95]

73. **An air travel levy aimed at reducing aviation emissions is likely to have a greater impact on behaviour in relation to short-haul flights because travellers have more choice of alternative modes of transport for short journeys. Air passenger duty may influence a decision about whether to fly to Paris but not to Tanzania, for example. Taxation could therefore be a useful tool for changing behaviour and reducing emissions in relation to short-haul flights but is less likely to have a similar impact on long-haul journeys.** We have particular concerns about the potential deterrent effect on travel to developing countries which we explore below.

The potential of aviation to contribute to adaptation funds

74. As we have made clear, climate change finance needs to be genuinely additional. This will require innovative financial instruments. The Group of Least Developed Countries (LDCs) has proposed an International Air Passenger Adaptation Levy (IAPAL). It says this will enable international air passengers to comply with their individual responsibility and show solidarity with developing countries. The IAPAL proposal envisages a levy on international air travel of US$6 per economy trip, and US$62 per business/first class trip. It is estimated that this would generate around US$10 billion annually which would be used to help developing countries adapt to climate change impacts. The LDCs claim that this mechanism would provide predictable, timely and genuinely additional funding for adaptation in the most vulnerable countries and that:

> The proposed levy will have no significant effect on passenger numbers—less than a tenth of the expected annual growth rate—and hence minimal or no negative impact on tourism dependent economies. By contrast, it could have significant positive impacts on the development of the poorest and most vulnerable countries and communities, by avoiding climate change impacts through timely and adequate adaptation measures funded by the revenue raised through the levy.[96]

75. The recent submission by the European Union for the forthcoming UNFCCC negotiations suggests that an emissions trading regime for aviation should be agreed in the International Civil Aviation Organisation (ICAO) by 2010.[97] Such an agreement would generate a similar amount of funding for developing country adaptation, for example

94 Q 81

95 Benito Müller and Cameron Hepburn, *IATAL: An outline proposal for an International Air Travel Adaptation Levy*, Oxford: Oxford Institute for Energy Studies, October 2006, p 36

96 International Air Passenger Adaptation Levy, a proposal by the Maldives on behalf of the Group of LDCs within the framework of the Bali Action Plan, 12 December 2008.

97 *A negotiation text for consideration at AWG-LCA*, Submission by the Czech Republic on behalf of the European Community and its Member States, Prague, 28 April 2009

through the auctioning of emission permits to airlines. However the Kyoto Protocol invited developed countries to pursue the limitation or reduction of aviation emissions through the ICAO: to date there has been no progress.

76. **We believe that an international aviation levy would be a welcome additional source of funds for adaptation. The International Civil Aviation Organisation may be successful in securing agreement for its proposed scheme, which it is estimated could raise up to $10 billion a year. However, if there seems to be insufficient progress in this forum, we recommend that the UK Government consider supporting the Group of Least Developed Countries' proposal for a similar scheme, as part of the measures to be discussed at the Copenhagen summit.**

77. **We are concerned about a possible decrease in the number of UK tourists visiting developing countries which an increase in air passenger duty might cause. We therefore also recommend that, for flights originating in the UK, compensation is given for any new Adaptation Levy on an economy fare by making an equivalent reduction in the UK air passenger duty for passengers travelling to long-haul destinations in developing countries. This could form part of any new financial commitment under the Copenhagen agreement.**

Tourism

Tourism and climate change

78. Tourism is highly dependent on climate. People's choices about where to go on holiday and when depend to a large extent on climate. The impacts of climate change, such as increased frequency of storms or floods, are therefore likely to affect revenue from tourism. A key issue for tourism in developing countries is the extent to which it can adapt to changing climatic conditions and retain or increase visitor stays.

79. The tourism sector will also need to reduce its greenhouse gas emissions if overall targets are to be met. Tourism Concern told us that the tourism sector lags behind others in recognising its responsibilities in relation to climate change and the environment. It noted that tourism consumes large quantities of energy and water, for example through air conditioning. There is therefore significant scope for decreasing the environmental impact of the tourism sector if the private sector and governments in developing countries work together to develop alternative sustainable energy technologies.[98]

80. Dr Murray Simpson of Oxford University described plans for the Caribbean to become the world's first carbon neutral tourism region which he said would generate huge media attention and create a positive environmental image for the region. He believed that there was considerable potential to co-finance energy efficiency, renewable energy and adaptation measures from tourist revenue and donations.[99]

98 Ev 164

99 Qq 86, 101

Tourism and development

81. The UN World Tourism Organisation has noted that tourism is a primary source of foreign exchange for 46 out of 50 Least Developed Countries and that tourism has the potential to lift people out of poverty through employment and entrepreneurial opportunities. ODI estimated that around 2-6% of jobs in Africa were dependent on tourism and noted that tourism was included in the Poverty Reduction Strategies of more than 80% of low income countries.[100]

82. We looked at different aspects of the tourism sector in Tanzania. We held discussions with tour operators, the Tanzania National Parks Agency (TANAPA) and visited a cultural tourism project. We also met officials from the Ministry of Tourism and Natural Resources. Tourism contributes 80% of Tanzania's foreign exchange earnings. We were told that the economic downturn had already begun to have an impact with 15% fewer visitors between June and December 2008. One result of this was that TANAPA's income had reduced and its ability to support local communities, conservation projects, training projects and tourist boards would be affected.

83. In Kenya tourism contributes 11.6% of GDP; in the Maldives it contributes 35% while in some Caribbean islands tourism can contribute up to 80% of GDP and account for 95% of jobs.[101] In addition, tourism is often labour intensive and employs significant numbers of women and unskilled and informal sector workers. The Dutch development organisation, SNV, told us that there were significant pro-poor benefits to be gained from encouraging small-scale entrepreneurs to become more involved in the sector, especially through the sale of handicrafts.

84. The Caribbean and Pacific Islands which depend heavily on tourism are also recognised as having fragile eco-systems—some are low lying and many have few other income-generating options.[102] Tourism Concern told us that, since the banana sector contracted in St Lucia as a result of the loss of preferential access to the EU market, tourism had become more important.[103]

85. The New Economics Foundation expressed concern that developing countries lost a significant amount of potential revenue from tourism through what is known as "leakage". Tourism revenue was expatriated to international hotel chains and suppliers of imported food and other goods which cater to tourists' preferences. While some leakage is inevitable, NEF believed that there was a need for more research into how the tourism sector could provide greater benefit to local economies.[104] However, ODI found that in The Gambia, despite tourism being largely run by seven European operators with most tourists on cheap package holidays, and even in a hostile business environment, 14% of spending on goods and services accrued to local non-managerial staff and entrepreneurs. This demonstrated

100 ODI, *Can tourism offer pro-poor pathways to prosperity?*, Briefing Paper 22, June 2007

101 Ev 164

102 Ev 164

103 Q 93

104 Q 83; Ev 185

that there could be significant local benefits to the economy from tourism and that these appeared to apply whether tourism was high-end or mass-market.[105]

86. IIED highlighted that DFID had taken the lead in pro-poor tourism up to the early part of this decade and that research it had commissioned had provided the "original thinking" for the pro-poor tourism work now undertaken by the UN World Tourism Organisation. DFID's Tourism Challenge Fund had "pioneered a private sector approach to the issue".[106] The UK had also contributed to the development of sustainable tourism in relation to the UK outbound tourism industry, particularly through its support to the UK Sustainable Tourism Initiative—now the Travel Foundation.[107]

87. DFID has now withdrawn from the tourism sector. But IIED believes it could "build on this track record, now encouraging attention to the public policy environment in its partner countries and within other development agencies." In particular greater attention to consumer awareness and tourism policies in destinations would be beneficial. The objective should be to scale up the current ethical and sustainable tourism movement "beyond the most responsible operators to the mainstream; beyond niche destinations to the mass tourism resorts; and complementing global standards with compatible local standards" that are appropriate for in-country sustainable development goals.[108]

88. We appreciate that the Paris Declaration on aid effectiveness encourages the division of labour amongst donors and the alignment of donor activities with the priorities of partner governments, as we discussed in our 2007 report on this subject.[109] It might not therefore be appropriate for tourism to be a focus for DFID's bilateral programmes but, given the growth potential of the sector, we believe it should re-engage in a targeted way. For example, in Arusha in Tanzania, we were told of the need for more training for guides, porters and other local staff who worked in national parks tourism. DFID could usefully support this type of capacity-building in the sector as part of its broader assistance to economic growth.

89. **We understand that it is not possible for DFID to be involved in every sector in developing countries and appreciate that tourism may be an area where it feels it no longer has a comparative advantage. However, given the economic importance of the tourism industry to so many developing countries in which DFID has a programme, and its inclusion in many Poverty Reduction Strategy Papers, the Department cannot afford to ignore it. Capacity-building in the sector, including training and development for local employees, could form part of DFID's livelihoods and growth programmes in countries where tourism makes, or has the potential to make, a significant contribution to the economy.**

90. There is also scope for DFID to engage in discussion on pro-poor tourism issues, as well as on mitigating the impact of tourism on climate change, in multilateral fora. We

105 ODI, *Can tourism offer pro-poor pathways to prosperity?,* Briefing Paper 22, June 2007

106 Ev 122; Q 18

107 Ev 122

108 Ev 122

109 Ninth Report of Session 2007-08, *Working Together to Make Aid More Effective*, HC 520-I

were therefore surprised to learn that, as of this year, the UK is withdrawing from membership of the UN World Tourism Organisation. The Department for Culture, Media and Sport told us it could no longer afford the membership of €320,000 a year.[110] Dr Murray Simpson explained the importance of membership of this body:

> It is the leading organisation dealing with tourism and climate change and it plays a similar role in relation to sustainable development and environmental improvement. […] UNWTO is the leading organisation promoting both corporate social responsibility and ethics and is heading a global campaign on protection of children in the sector [….] UNWTO is very active in supporting tourism activities in poor and emerging markets in keeping with the UK's international development agenda generally and its support for Africa specifically—including in response to the digital divide and tourism and sustainable development.[111]

91. **We accept the argument that it is important for the UK to maintain its engagement with the UN World Tourism Organisation. If the Department for Culture, Media and Sport is not able to continue to find the membership fee, we believe that DFID should take this over. We believe that membership of the UN World Tourism Organisation would sit comfortably within DFID's remit and would enable it to influence wider debates on the contribution that tourism can make to poverty reduction and on the need for the tourism sector to address climate change.**

Food and horticulture exports from developing countries

92. We also considered the complexities consumers face when making decisions about whether to buy produce which has been transported by air from developing countries. Although less that 1% of all food is carried by air, it accounts for 11% of total food transport CO_2 emissions. However these figures need to be put in context. The Food Ethics Council pointed out that, compared to emissions from other aspects of farming and food, air-freighted food contributes only 0.3% to total UK emissions whereas refrigeration accounts for 3%, alcoholic drinks for 1.5% and meat and dairy for 8%.[112]

93. The Fresh Produce Consortium noted that 60% of air-freighted fresh produce is brought to the UK in passenger aircraft, and that there is no evidence to suggest that these aircraft would not fly if less fresh produce were imported. The remaining 40% of air-freighted goods carried on dedicated cargo planes accounted for only 0.12% of total UK greenhouse gas emissions. The Consortium maintained that switching to low-energy light bulbs in the UK could contribute more to emissions reductions than rejecting fresh fruit and vegetables from Africa.[113]

94. Over one million livelihoods in sub-Saharan Africa are supported by the export of fresh produce to the UK. The Kenyan horticultural industry supports around 135,000 Kenyans

110 Ev 107

111 Ev 155

112 Food Ethics Council, *Flying Food: Responsible retail in the face of uncertainty*, May 2008, p 9

113 Ev 113

directly and many hundreds of thousands indirectly. Produce supplied to the UK generates at least £100 million a year for Kenya.[114]

Reducing the impact of response measures on export horticulture

95. When we met Dr Maggie Opondo, from the University of Nairobi, she commented that Kenya had been successful in building up its exports of fresh produce but that negative publicity in developed countries about 'food miles' risked damaging this important industry. The Fresh Produce Consortium argued that focusing solely on the method of transport of imported food and the distance between consumer and producer as a basis for determining whether it is good or bad from an environmental perspective is both short-sighted and misleading for consumers. This is because transport accounts for only one element of the carbon emissions of a particular product. It would be better to look at the carbon footprint of the whole product supply chain.[115]

96. The emissions produced by flowers grown in Africa and flown to the EU can be less than a fifth of that for flowers grown in heated and lit greenhouses in the Netherlands.[116] Similarly, the production and air freighting of Kenyan flowers has been shown to emit significantly less greenhouse gases than the equivalent Dutch flowers: CO_2 emissions from Dutch flower production were 5.9 times higher than Kenyan.[117] We saw an example of this on our visit to Kenya at the Oserian Flower Farm where flowers are produced using geothermal energy, hydroponics, drip irrigation and an integrated pest management system which reduce water, fertiliser and pesticide use.

97. Countries such as Kenya which have very low per capita emissions levels compared to industrial countries have what is known as 'ecological space' to increase their emissions within certain limits on the grounds of equity.[118] It is therefore argued that they "should not be discriminated against on carbon intensity grounds because they are within the boundaries of their ecological space."[119]

98. The ODI has suggested that the creation of a "good for development" label would indicate to consumers the positive developmental impact associated with purchasing developing country produce. Such a label would not create any new environmental or labour standards since there are already schemes which do this—for example the Fair Trade label—but would cover a greater proportion of developing country exports and include more producers than existing schemes.[120] Other labelling options have been proposed, for example carbon labelling by the UK Carbon Trust and a "grown under the

114 Benito Müller, *Food Miles or Poverty Eradication? The moral duty to eat African strawberries at Christmas*, Oxford Institute for Energy Studies, Energy and Environment Comment, October 2007.

115 Ev 112

116 Haug et al, *Trade, Environment and development: import of flowers from Africa to Norway*, Norwegian University of Life Sciences, May 2008.

117 Cranfield University, *Comparative study of cut roses for the British market produced in Kenya and the Netherlands*, 7 February 2007.

118 Q 132

119 Müller, *Food miles or poverty eradication?*

120 Overseas Development Institute, *A review of ethical standards and labels: Is there a gap in the market for a new "Good for Development" label?,* ODI Working Paper 297, 2008. See also Q119.

sun" label by the Kenyan High Commission.[121] A recent report from our colleagues on the Environmental Audit Committee concluded that the Government needed "to put more resources into better environmental labelling".[122]

99. Another suggestion is for the Government to offset the air freight emissions from fresh produce imported to the UK. It has been estimated that it would cost between £2.8 million and £6.7 million to offset the air freight emissions of fresh fruit and vegetable imported from Sub-Saharan Africa (excluding South Africa).[123] The offsets could be considered as part of the UK's financial commitment to helping developing countries under any new global climate change agreement. It might also increase demand for such products from consumers concerned about food miles. We asked the Minister about labelling and about offsetting the emissions from air freighted produce from developing countries. He agreed that it was important for consumers to know about carbon emissions of produce but believed that there was no public demand for labelling to indicate this. The Government had not considered buying carbon offsets. [124]

100. **There is a danger that steps taken by consumers in the UK to reduce their contribution to carbon emissions may lead them to avoid buying produce from developing countries in the mistaken belief that air-freighted food and flowers necessarily have a higher carbon footprint. We believe that consumers need accurate information about the way products have been grown as well as transported. Labelling imported fresh produce to show total carbon emissions for the whole production cycle would be a useful tool to enable consumers to make informed choices about the goods that they buy. We believe the UK Government should conduct research on how such a scheme might be introduced and carry out an assessment of the potential benefits to producers in developing countries.**

101. **The Government could also consider paying to offset the air freight emissions of horticultural products from developing countries. Ideally this would be done through funding sustainable mitigation projects in the exporting countries, which would provide poor countries with a double dividend of supporting their export earnings and contributing to their domestic low-carbon development. This proposal could be a worthwhile use of funds, particularly if it could be counted against compliance with any financial commitment made as part of a new global agreement reached at the Copenhagen summit. We therefore recommend that the Government explore its feasibility prior to the Copenhagen conference and report back to us on its conclusions.**

121 Benito Müller, *Food Miles or Poverty Eradication? The moral duty to eat African strawberries at Christmas*, Oxford Institute for Energy Studies, Energy and Environment Comment, October 2007

122 Environmental Audit Committee, Second Report of Session 2008-09, *Environmental Labelling*, HC 243, para 10

123 Müller, *Food miles or poverty eradication?*

124 Qq 275-277

5 Towards low carbon development

102. In the Bali Action Plan agreed in December 2007, developed countries were called upon to make "measurable, reportable and verifiable" (MRV) mitigation commitments and actions to reduce emissions. The parties also agreed that developing countries should begin to consider appropriate national mitigation actions in the context of sustainable development. Such action on climate change should be supported by MRV "technology, financing and capacity building" from developed countries.[125] An important role for DFID, and other donors, is therefore to ensure that there is sufficient financial and technical support for developing countries to begin the desired mitigation actions.

103. It is estimated that in order to meet the EU objective of restricting global temperature increases to below 2°C, developing country greenhouse gas emissions will need to be reduced by 15-30% below baseline by 2020.[126] Following the UNFCCC conference in Poznan in December 2008 the Parties to the Convention have begun to put forward proposals for achieving these mitigation objectives.

The impact of the economic downturn

104. Lord Stern identified three main goals for mitigating greenhouse gas emissions: greater energy efficiency; low carbon growth; and reduced deforestation.[127] His view was that low carbon growth did not necessarily mean a low growth economy. He believed that the current economic downturn provided an important opportunity to make the transformation to a low carbon economy because the costs of inputs, such as hydrocarbons, were lower during a downturn and because such investments could help to kick-start economic growth.[128] He told us it was also important to lay the foundations for a continued period of economic growth now as delaying action would be more costly in the long term.[129]

105. David Woodward, an independent consultant, believed that the current economic and financial crisis challenged the traditional model of economic growth. He urged the Government to use the opportunity to design a new development model based on "the achievement of societal objectives: meeting basic needs, increasing well-being, and ensuring environmental sustainability."[130] This tension—between continued economic growth and seeing climate change and the current economic downturn as an opportunity to rethink the basis of economic development—is raised in some of the submissions we received.[131] It is most clearly evident in the debate about the type of development that

125 UNFCCC, *Bali Action Plan*, 2007, Para 1bii

126 *Climate Change: Commission sets out proposals for global pact on climate change at Copenhagen*, European Commission Press Release, 28 January 2009. This should exclude reductions achieved to generate offsets for developed countries, for example through the CDM, to ensure emissions reductions are not double-counted.

127 Q 193

128 Q 192

129 Qq 195-200

130 Ev 172

131 Ev 117, 173, 186

donors should be encouraging given that economic growth to date has mainly come from industrialisation, which is associated with increased greenhouse gas emissions. Accordingly this chapter examines how DFID can help developing countries to achieve their development goals without replicating the unsustainable aspects of previous economic development.

What is low carbon development?

106. DFID defines low carbon development as patterns of social and economic development which ensure reductions in greenhouse gas emissions at a level consistent with stabilising global emissions at safe levels.[132] DFID notes that there is no blueprint for what this will look like in developing countries—different countries will require different models and economic growth opportunities should not be constrained. DFID believes that growth can help developing countries both to reduce poverty and adapt to climate change. This growth should be low carbon and encourage greater resilience to the impacts of climate change: "As a minimum low carbon development should not leave countries more vulnerable to the inevitable impacts of climate change and, ideally, should help increase their resilience to these impacts."[133]

107. Others have questioned the inevitability of a link between low carbon growth and development. Jodie Keane of the ODI stated:

> When you are making the link between low carbon growth and development you have to bear in mind that many developing countries—particularly the less developed countries—have already struggled with existing growth strategies for years."[134]

Her colleague Leo Peskett pointed out that "green growth" and poverty reduction were not always linked. While the forestry sector offers developing countries significant opportunities for low carbon growth, pursuing strong mitigation targets could negatively impact on those groups of people who depend on the forests for their livelihoods. [135]

108. There are ways to avoid this. Jodie Keane told us about World Bank studies in sub-Saharan Africa and Latin America which demonstrated "win-win" situations: the reduction of emissions and the promotion of development.[136] In Tanzania we heard about the Mpingo Conservation Project which was seeking to ensure villages which depended on local forests could earn an income from exploiting them sustainably. The Mpingo or African blackwood tree is used to make musical instruments such as clarinets, oboes and bagpipes. The project was seeking to gain Forest Stewardship Council (FSC) certification of the timber which could potentially increase the forest community's income by 100 times. In order to achieve this certification the whole forest had to be managed sustainably.[137]

132 Ev 80

133 Ev 80

134 Q 139

135 Q 146

136 Q 151

137 As the Environmental Audit Committee is conducting an inquiry into how best to reduce emissions from deforestation and land degradation we have not sought to duplicate that work in this report.

Other areas where developing countries could pursue low carbon growth are through changing land use patterns and through the production of biofuels (which are discussed at paragraphs 136-138).

109. DFID has pointed out that some developing countries may be reluctant to reduce emissions sooner than they need to because of the costs associated with switching to new technologies and the possible trade-off with economic growth. In addition it is possible that delayed mitigation might provide an opportunity to take advantage of cheaper and cleaner technologies which might be developed in the future. However if in the process of waiting, developing countries lock themselves into high carbon infrastructure, it could prove more costly to convert or switch to low carbon options in the future.[138] Such decisions need to be made on the basis of knowledge and evidence of the benefits and associated immediate and long term risks.

110. DFID has begun to fund research and pilot projects on low carbon options in a number of relatively high emitting developing countries. This includes funding to: the US-based Centre for Clean Air Policy; the World Bank Clean Energy Investment Framework (CEIF); and the Regional Economics of Climate Change Studies. However DFID acknowledges that low carbon development is a new area about which little is known especially in relation to those low-income countries which have negligible industrial sectors.[139] The Sussex Energy Group made a similar point: "There is limited empirical evidence available upon which to develop policy geared towards low carbon development."[140] The Group recommended greater collaboration in research with developing countries arguing that only through early involvement in research can poor countries develop the necessary technological capacity to make low carbon growth sustainable.[141]

111. One low carbon option is geothermal energy. We saw this in operation at the Oserian flower farm in Naivasha. We were told that the highest proportion of the costs of geothermal energy was in the exploration needed to locate appropriate sites and putting in the infrastructure. Once this was in place, the return was rapid and maintenance costs were low. The UN Environment Programme told us that they were providing assistance in this area to the Kenyan Government by underwriting exploration costs.

112. DFID's most significant investment in the development of low carbon technology is through the World Bank's Climate Investment Funds (CIFs) which will provide short term funding to help tackle climate change and longer term funding to pilot new approaches. These schemes were endorsed by the World Bank board in July 2008 and $6.1 billion has been pledged to them.[142] As discussed in Chapter 3, DFID's contribution is half of the £800 million Environmental Transformation Fund (ETF) which is jointly managed by DFID and DECC.

138 Ev 81

139 Ev 81

140 Ev 156

141 Ev 159

142 Ev 83

113. DFID is planning a new Centre on Climate and Development which will have demand-driven knowledge management as part of its remit. The Minister told us that many developing countries had expressed interest in the Centre.[143] **We are pleased that DFID has begun to engage in research on low carbon development paths. There is a pressing need for more research into options for low-income countries. We believe that DFID should build this capacity in developing countries and facilitate greater research collaboration between them. We welcome the establishment of the Centre for Climate and Development and recommend that its remit include development of knowledge which is relevant to, and driven by demand from, low-income countries.**

Carbon trading

114. According to DFID the most effective way to drive investment in low carbon development is to create a global carbon market in which carbon is traded between low and high emitters.[144] This provides greater incentives for companies to invest in new technologies:

> By placing a price on carbon and reflecting the true cost to society of greenhouse gases, emissions trading will drive global emission reductions at lowest cost (key to making ambitious goals politically acceptable), and stimulate business to innovate and to invest in low carbon technology and energy efficiency by rewarding those who take action.[145]

115. In the EU, carbon trading currently operates primarily through the Emissions Trading Scheme (ETS). The ETS sets a cap or ceiling on the total amount of CO_2 which can be emitted from large industries in Europe, such as power stations and factories. Permits equal to this cap are then distributed to companies which can buy or sell them, depending on their emissions levels. The number of permits will be reduced over time.[146]

The Clean Development Mechanism (CDM)

116. Developing country participation in carbon trading occurs mainly through the Clean Development Mechanism (CDM). The CDM was created under the Kyoto Protocol as one of three flexible mechanisms to help reduce the cost of achieving greenhouse gas emissions reduction targets. The CDM allows developed countries to offset their emissions through the purchase of Certified Emissions Reductions (CERs) from offset projects in developing countries. It has thus provided a model for the carbon market through which developed countries contribute to mitigation activities in developing countries. A 2% levy on all CERs is used to help finance the Adaptation Fund (see Chapter 3).

117. The ETS also allows companies to purchase credits from companies operating in developing countries through the CDM. This has led to the criticism that Europe is simply offsetting its carbon in developing countries rather than making the necessary and perhaps

143 Q 227

144 Ev 78

145 Ev 79

146 Ev 180

difficult cuts to emissions at home.[147] ODI on the other hand has argued that the ETS has been critical for the success of the CDM since, without it, European companies would not have invested in emissions reductions projects in developing countries.[148]

118. Most CERs have been generated in China (44%), India (23%), South Korea (13%) and Brazil (11%).[149] China has supplied the greatest number of CERs to the market every year since 2005-06.[150] This trend is likely to continue since most projects are in hydro and biomass energy projects, typically associated with heavy industry. These countries have a number of existing industries with relatively high emissions which can benefit from being "cleaned-up". In contrast, with low levels of industry in Africa, there are fewer emissions to off-set. Another problem in Africa is the lack of pilot or demonstration CDM projects to encourage the local business sector to become involved and provide finance. Accordingly Africa accounts for only 2% of CDM projects, although there is evidence to suggest increased participation.[151] The UK Government is working with a private company, AfriCarbon, to help attract greater foreign investment in African CDM projects.[152]

119. The CDM is seen as playing an important role in linking sustainable development initiatives in developing countries to finance from developed countries. In this way it enables developing countries to tap into a growing carbon market. However the future of the CDM after 2012 is uncertain. It may not be renewed at the UNFCCC Copenhagen conference later this year, or it may be reconfigured. There are a number of proposals on the table. One proposal includes "enhancing" the CDM to go beyond its current project-based approach to include sector-wide activities. For example, a base-line could be set for a country's utility sector and reductions below that base-line rewarded with CERs.

120. Another proposal is to expand the CDM so that it also covers mitigation policies undertaken by developing country governments who would be rewarded with CERs for emission reductions achieved through policy interventions, such as energy efficiency policies or new automobile standards. Others have suggested that the structure of the CDM needs to be changed so that it includes projects which improve energy efficiency or support renewable energy, which are currently excluded.[153]

121. Witnesses highlighted weaknesses of the CDM. WWF said that the fact that the CDM is also meant to deliver sustainable development benefits to developing countries is often ignored.[154] Leo Peskett of ODI commented that the nature of projects funded under the CDM encouraged companies to compete for projects which were not connected to poverty reduction objectives.[155]

147 Ev 180

148 Ev 131

149 http://cdm.unfccc.int/Statistics/Issuance/CERsIssuedByHostPartyPieChart.html

150 J Keane, *Achieving green growth*, ODI background paper, October 2008

151 Ev 80; Q 157

152 Ev 80

153 Ev 181-182

154 Q 167

155 Q 150

122. There are also concerns about the "additionality" criterion of the CDM which requires that all projects demonstrate that they have been driven by the CDM and would not have happened without it. Leo Peskett referred to studies which showed that additionality was questionable in a high proportion of projects.[156] WWF also commented on this saying that developers could be getting credit under the CDM for projects which they had already completed or planned.[157] We were told that, as a result, the CDM had only had a small impact on global emissions reductions.[158]

123. There is room to expand the CDM to ensure that more developing countries, especially in Africa, can make use of it. The World Bank has calculated the value of the global carbon market at $64 billion of which only $7.5 billion goes through the CDM.[159] According to ODI, the ETS and CDM together are currently trading only around 0.5% of global greenhouse gas emissions which are in the region of 49 billion tonnes of CO_2 per annum.[160] In addition key sectors in developing countries, such as forestry and land use, are currently excluded (although concerns have been expressed that their inclusion could cause the price of carbon to collapse).[161]

124. **We appreciate that the Clean Development Mechanism is a relatively new mechanism and that there are bound to be teething problems. However these need to be resolved urgently. The CDM has the potential to make a significant contribution to emissions reductions in developing countries but to date it has had little impact in poorer developing countries and there are few projects in Africa outside South Africa. The geographical distribution of CDM projects needs to shift towards Africa in any new iteration of the Mechanism. Proposals to reform the CDM should have this as a primary objective. We recommend that DFID consider funding appropriate demonstration projects in Africa to encourage this. "Additionality" of projects also needs to be properly defined to help provide confidence that the Mechanism is achieving its objectives. We are also cautious about a mechanism which could be seen purely as a technical solution to harmful emissions. If developing countries are to benefit, and if the sustainable development objectives of the UNFCCC are to be met, the CDM should be more closely linked to poverty reduction strategies in developing countries. We believe that DFID should seek to address these issues at the Copenhagen conference.**

Technology transfer

125. The requirement for developed countries to facilitate the transfer of low carbon technologies to developing countries is set out in the UN Framework Convention on Climate Change (UNFCCC). According to the Sussex Energy Group it was this aspect of the UNFCCC that provided the carrot to attract developing countries to the Convention. It

156 Q 156

157 Q 167

158 Q 160

159 Ev 79

160 Ev 131

161 Q 159

is also the aspect of the Convention which has caused most controversy and made the least progress in negotiations since it was agreed.[162]

126. The International Energy Agency has said that, in order to restrict the rise in global temperatures to no more than 2˚C, new technologies which are not yet widely available will need to become more widespread.[163] Lord Stern thought that progress was being made in this regard: "technical progress has been spectacularly rapid and the number of new ideas coming forward on low carbon technologies is quite remarkable, and that is moving at a very encouraging rate."[164] Others have however expressed concern that the scope for technology transfer to developing countries has not been fully realised.[165] In particular, technology for climate change adaptation is largely unexplored terrain.

127. There are two separate issues regarding technology transfer. One is that of intellectual property rights (IPR), which are protected under international law. The other is sharing "know how". In Kenya, Professor Odingo, former Vice Chairman of the IPCC, told us that the IPR issue was overstated: it was not necessary to share trade secrets in order to give developing countries the benefits of climate friendly technologies.

128. DFID's view is that much of the technology needed to decouple emissions from economic growth already exists.[166] The Sussex Energy Group highlighted the importance of technology transfer from research through to commercialisation as well as ensuring technology transfer between countries. This included transfer between developing countries, where the most appropriate technology may be located, as well as from rich to poor countries.[167]

129. One way of supporting this process would be for the UK Government to work with British companies operating in developing countries not only to encourage them to reduce their contributions to greenhouse gas emissions, but also to create the potential for technology transfer, and to develop appropriate technology solutions.[168] This might then provide scope for programmes which helped non-UK private companies in developing countries to understand and adapt technologies to local conditions.[169]

130. **The transfer of low carbon technologies to developing countries is essential if they are to avoid high carbon growth. Greater effort is required to ensure that the benefits of rapid technical progress in developed countries are shared with developing countries, where such technologies are appropriate. Facilitating appropriate low carbon technology in developing countries is an initiative which offers potential for a joined up UK development and trade policy approach and is one which the Government should explore. The private sector has an important role to play and should be encouraged to**

162 Ev 157

163 "Watchdog in place to avert 'shocking' climate change", *Financial Times*, 13 November 2008

164 Q 192

165 Ev 156-157

166 Ev 81

167 Ev 83

168 Ev 146

169 Ev 157

participate. We recommend that DFID examine how it can work with the Department for Business, Enterprise and Regulatory Reform to establish a programme to facilitate UK private sector involvement in low carbon technology transfer to poor countries.

Meeting the energy needs of the poorest

131. It is important that, in least developed countries which have negligible emissions, low carbon options are not pursued at the expense of ensuring that people's basic energy needs are met. As WWF said, "we must remember that the point here is reducing poverty and the long term development, not necessarily contributing to the global carbon emission reduction."[170] Any international agreement which seeks to chart a new, more sustainable global energy regime should take into account the energy needs of the poorest.

132. In many developing countries, access to domestic electricity is severely limited. In Tanzania for example we were told than less that 10% of the population was connected to the national grid. In Kenya only 15% of the population has access to electricity. Limited resources mean that the poorest often choose the cheapest energy options rather than the ones which will deliver environmental benefits. In Kenya and Tanzania, we saw how most people still relied on burning wood and charcoal for their domestic needs which depleted forests and contributed to carbon emissions. A World Bank Study found that connecting all households in developing countries to an electricity source would have almost no impact on global greenhouse gas emissions. This would effectively mean there was a negligible trade-off to be made between meeting basic energy needs and reducing emissions.[171]

133. Cheap and environmentally sustainable energy sources are already being developed. In Kenya we learned about a pilot project aimed at using the seed from the jatropha plant to make oil. The oil costs half as much as diesel and can help support livelihoods. It can be used in lamps, to operate water pumps and to run small engines and generators. The affordability of jatropha meant that villagers were able to run small vehicles to take their produce to town and sell it for a higher price and to fuel generators to power ice-making machines so that the fish and seafood that they caught could be chilled and transported to markets. The jatropha plant grows quickly, is suitable for arid and semi-arid lands and it can be grown as hedging or intercropped so it does not impinge on production of food crops. This type of pilot project demonstrates how communities can be assisted to gain access to affordable and sustainable energy to meet their needs.

134. DFID told us about its support for a number of initiatives which promoted practical energy options in developing countries, including the Sustainable Renewable Energy Programme being developed under the Climate Investment Funds; the Global Village Energy Partnership, a UK NGO which provides support to small businesses investing in energy products, and the World Bank Energy Sector Management Assistance Programme (ESMAP) which provides support at country level.[172]

170 Q 180

171 Q 179

172 Q 286

135. **It is inevitable that many developing countries will continue to rely on fossil fuels and biomass for their energy requirements for some time to come. However these countries are historically low emitters and equity demands that they should be permitted to ensure that the poorest people are able to meet their basic energy needs even where this relies on high carbon methods. Emphasis on low carbon growth should not take precedence over ensuring developing countries can tackle more immediate social needs. Small-scale initiatives such as the jatropha fuel project we saw in Kenya provide innovative opportunities to improve the livelihoods of the poorest whilst meeting their energy needs in a sustainable manner. Scaling up such small-scale projects and replicating them across developing countries is the next essential stage and requires the support of donors, including DFID**.

Biofuels

136. One low carbon energy option for developing countries is to grow crops for biofuels. ODI told us that scepticism about biofuels and their impact on food production had gone too far and failed to distinguish between biofuels which were good for development and those which were not. While emerging economies such as Brazil have enormous capacity to produce biofuels efficiently, many poor countries do not have enough land to produce both biofuels and food without having an adverse impact on food prices.[173] Jodie Keane and Leo Peskett of ODI pointed out that more use of biofuels would mean less use of fossil fuels and biofuel production should therefore be viewed as part of a solution to reducing greenhouse gas emissions. They gave the example of Malawi which had sufficient land to grow more sugar cane for producing bioethanol, without affecting food production, which could be substituted for more expensive petroleum imports. India also had significant potential in this regard.[174]

137. DFID told us that the UK is encouraging the commercial development of new technologies which would allow the production of biofuels from non-food sources—known as "second generation" biofuels.[175] The Government sees this as part of its strategy to help ensure food security. Others have warned that biofuels pose risks to forestry and land use patterns and consequently should be encouraged with caution.[176] Current EU policy fails to distinguish between different groups of developing country producers and continues to protect European producers of biofuels. ODI recommends the removal of import barriers from countries such as Brazil which can produce biofuels in an efficient manner, and that the EU should seek to encourage the production of biofuels in sugar-exporting developing countries in the African, Caribbean and Pacific (ACP) group of states through technology and knowledge transfer.[177]

138. **Meeting the energy needs of the poorest in a sustainable way means that low carbon technologies must be made available, free or at a low cost with high incentives, to the poorest and most vulnerable. This includes biofuel technologies where**

173 Ev 130

174 Qq 152-153

175 Ev 90

176 Ev 103

177 Ev 130-131

opportunities exist to develop these sustainably and without negative repercussions on food security. We understand that more research is needed into how best to ensure low carbon technology and know-how is transferred from developed to developing countries, and between developing countries. Methods of scaling-up from pilot projects to commercialisation also needs examination. This research should form part of the remit for DFID's new Centre for Climate and Development and where possible should be undertaken in developing countries. While many developing countries are currently low emitters it is important that research is carried out quickly so that it is available as they begin to move towards increased industrialisation.

6 The Copenhagen conference

139. The Parties to the UNFCCC will gather in Copenhagen from 7-18 December to discuss and, hopefully, agree the framework for a new climate agreement to replace the Kyoto Protocol which expires in 2012. The working groups have already begun negotiations, starting in Bonn in March with four further sessions planned before December. In addition, President Obama has called for a new summit to be held alongside the G8 meeting in July to discuss climate change.[178]

140. The Copenhagen conference is seen as an important opportunity to secure an agreement on climate change which includes all the major emitters as well as the poorest countries before the world collectively reaches what are considered to be dangerous levels of greenhouse gas emissions. However talks in December 2008 in Poznan, Poland, intended as the stepping stone towards the Copenhagen conference, were viewed as largely disappointing in terms of outcomes, although progress was achieved towards making the Adaptation Fund operational.[179] Much is therefore at stake at the Copenhagen conference.

The UK Government's objectives

141. The Government's five key sustainable development objectives for the Copenhagen conference are to agree:

- A long-term goal with credible near-term targets that keeps any temperature rise to below 2°C;
- A way of sharing greenhouse gas emissions that is fair and equitable;
- Support for developing countries to build their resilience and adapt to climate change;
- Support for technology development and transfer that benefits developing countries based on their needs and circumstances;
- A reformed carbon market that expands the reach and impact of carbon finance.[180]

142. Lord Stern told us he thought that it would be possible to get an agreement in Copenhagen. He said that three things had happened since his 2006 report which made a deal more likely:

- there was scientific evidence to suggest the problem was more severe than originally thought;
- technical progress made finding solutions easier; and,
- there is a stronger international commitment to finding solutions.[181]

178 "Leaders to meet in summer for special climate change talks", *The Independent*, 29 March 2009

179 Q 26

180 Ev 77

He said the global economic downturn made progress more imperative but also offered an opportunity to "accelerate towards the low carbon growth path that we as a world are going to have to follow."[182]

143. At the G20 Summit in London in March 2009 progress on securing economic stimulus packages which included "green" measures was disappointing. This was despite many asserting in advance of the summit that "green growth" and "green jobs" were the way out of the recession, particularly in the US. The G20 communiqué gave a "commitment to use fiscal stimuli for low carbon investment, to identify and work together on policies for green growth and to reach a new climate change agreement at Copenhagen." [183] However no specific sums of money were pledged for this objective and no indication was given of what this would mean in practical terms for developed or developing countries.

144. DFID has said that one of its priorities is to play a leadership role in international climate change negotiations and to ensure that any new global agreement is "development friendly"[184] At the very least this should mean setting rigorous emissions targets for industrial countries to reduce the impact of climate change on developing countries as well as sufficient financial assistance to developing countries to help them adapt to changes already taking place and those anticipated.

Setting emissions reduction targets

145. The Stern Review, *The Economics of Climate Change*, argued that the future price of failure to act quickly on climate change would far outweigh the costs involved in taking strong early action to mitigate emissions now. Tackling climate change head-on was viewed as the most effective way to stop it affecting economic growth:

> Tackling climate change is the pro-growth strategy for the longer term, and it can be done in a way that does not cap the aspirations for growth of rich or poor countries. The earlier effective action is taken, the less costly it will be.[185]

146. The Review estimated that spending just 1% of global income every year would stabilise atmospheric concentrations of greenhouse gases (GHG) at between 450 and 550 parts per million (ppm) CO_2 by 2050. It was estimated that at this level the average global temperature rise would be about 2˚C which is considered by some scientists to be a safe level. However, if nothing was done, under a "business as usual" scenario, the stock of GHG could more than treble by the end of the century and this would give a 50% risk that global temperature increases would exceed 5˚C during the following decades. [186]

181 Q 201

182 Q 201

183 *G20: top 10 outcomes*, www.number10.gov.uk

184 Ev 76

185 Stern Review, *The Economics of Climate Change*, 2006, Summary

186 *Ibid*. It should be noted that all such projections are based on particular modelling frameworks. Using different climate models or assumptions produces different estimates of GHG emissions levels and temperature rises.

147. More recently, in June 2008, Lord Stern revised his estimate of the costs of mitigation because climate change was advancing faster than predicted. He said it was now necessary to double spending to 2% of global income to keep the level of CO_2 in the atmosphere at an acceptable level and avert a climate disaster.[187] This translates into a peaking of global emissions by 2020 and a reduction in emissions by at least 50% by 2050, compared to 1990 levels.[188] Lord Stern has cautioned that if leaders fail to take urgently needed actions this year, "climate change impacts will likely cost over 20% of global output—more than the Great Depression and both World Wars combined, in addition to the human deaths and species extinctions."[189]

148. We have already discussed the UK's commitment to a 34% cut in greenhouse gas emissions by 2020. The UK has also committed to an 80% reduction in greenhouse gas emissions by 2050.[190] The EU has agreed to cut its overall emissions by 20% by 2020 and to increase this to 30% subject to commitments from other developed countries in an international agreement.[191] However, this is seen as falling short of what is required. China, a significant emitter, has recently announced that it will consider agreeing to a target for emissions reductions. This would be an important step which could help pave the way for agreement in December.[192] **It is vital that rich countries set very rigorous targets for reducing their greenhouse gas emissions. These countries bear primary responsibility for current levels of gases in the atmosphere. Emerging economies and industrialising countries will also need to take actions but these should be proportionate to their historic level of emissions. The principles of reducing global emissions and sharing common but differentiated responsibility should provide the over-arching framework for the UK's negotiating stance in Copenhagen.**[193]

149. **We are concerned however that only months away from the Copenhagen conference many countries are unwilling to put figures on the table. The Government should take a strong lead in encouraging other high emitters to take the tough decisions necessary. The EU is apparently waiting to see what others do before making a commitment to the stringent targets which are deemed necessary. We understand that this is a negotiating tactic, but consider it to be a high-risk strategy. Too many important decisions are being left until the last minute, with the danger that agreement may not then be secured. A commitment to achieving a successful outcome and a willingness to be flexible must be demonstrated by all parties, including the UK and the EU. The UK should put pressure on its EU partners to make progress on establishing an agreed negotiating position now.**

187 "Cost of tackling global climate change has doubled, warns Stern", *The Guardian*, 26 June 2008

188 Ev 78

189 Stern Review, *The Economics of Climate Change*, 2006

190 Q 242

191 Q 242

192 "China considers setting targets for carbon emissions", *The Guardian*, 19 April 2009

193 These principles are behind several frameworks, notably Contraction and Convergence (www.gci.org.uk/contconv/cc.html) and Greenhouse Development Rights (www.sei-us.org/climate-and-energy/GDR.html)

Appropriate actions from developing countries

150. The principle of "common but differentiated responsibility " provides the framework for international negotiations on climate change. It refers to the shared responsibility to protect the climate whilst recognising that developed countries bear the larger responsibility due to their past and current levels of emissions and because they have greater financial resources to act.

151. However, this does not mean that developing countries have no responsibilities. WWF told us that many developing countries were already beginning to think about mitigation activities beyond what was required of them: "China, Mexico and South Africa are doing some very ambitious things entirely outside existing obligations because they think it is the right thing to do."[194] China's actions on climate change are crucial. In our report on DFID's programme in China we commended the Department for its "comprehensive approach" to climate change in China and highlighted its importance in the run-up to the Copenhagen summit. We recommended that UK support for climate change work in China should continue with a co-ordinated strategy across all relevant UK Government Departments.[195]

152. **We are pleased that industrialising countries such as China are beginning to consider appropriate mitigation actions. The UK Government should encourage such initiatives. As we said in our recent report into DFID and China "the path that China chooses, in terms of carbon emissions, energy use and its sourcing of natural resources, will strongly affect the international community's efforts to address climate change." We recommend that DFID ensure that the new Centre for Climate and Development includes research and policy analysis on climate change in China as one of its focus areas.**

Financial assistance for developing countries

153. Any new agreement reached at Copenhagen needs to recognise that, unless developing countries receive funding for adaptation, there is a very real risk that the gains made in poverty reduction thus far may be eroded. The IIED thought that DFID should be pushing harder on the link between adaptation measures and poverty reduction in international negotiations.[196] Lord Stern told us that both mitigation and adaptation activities in developing countries would require "substantial finance". He said climate change had not been taken into account when figures for official development assistance (ODA) had been agreed in 2002 ahead of the Monterrey Summit on Financing for Development nor in 2005 ahead of the Gleneagles G8 Summit.[197] In Chapter 3 we discussed the need for new sources of funding for adaptation and the importance of being able to demonstrate that such funding was additional to existing ODA commitments.

194 Q 170

195 Third Report of Session 2008-09, *DFID and China*, HC 180-I, para 84; see also para 136

196 Q 280

197 Q 201

154. Lord Stern has suggested that donor countries should increase their ODA to 1% of GDP to fund adaptation in developing countries.[198] As we have indicated, there are many other estimates of the additional costs which adaptation will place on developing countries. WWF told us:

> The issue to make a global agreement at Copenhagen work is intimately bound up with both finding suitably large sources of sustainable and predictable finance coming from the rich world to then be well governed and well spent in developing countries in terms of helping to secure a lower carbon transition there.[199]

The DFID Minister told us:

> We recognise that ODA will not be able to deliver all of the additional finance that is going to be required to tackle climate change, but I am wary of taking it much further […] because of the nature of the negotiation process that is going on ahead of Copenhagen. That is the prize that we are all looking at. We are clear that there has got to be some additionality.[200]

155. **Establishing the principle of additional funding for adaptation is crucial to securing agreement in Copenhagen. We appreciate that it may be too sensitive for developed countries to make firm commitments at this stage, but the UK Government should show moral leadership and confirm that it will indeed be putting new funding on the table in Copenhagen. This would send out an important signal to poor countries that the developed world is prepared to meets its responsibilities towards them. It might also encourage other donors to be equally bold in fulfilling their clear obligations on adaptation costs.**

198 Nicholas Stern, *The economic crisis and the two great challenges of the 21st century*, a speech delivered at the DFID Conference on Securing our Common Future, 9 March 2009

199 Q 174

200 Q 262

7 Conclusion

156. According to the UNDP, climate change is "the defining human development issue of our generation. No issue merits more urgent attention or more immediate action."[201] Lord Stern referred to the battle against poverty and the management of climate change as the two great challenges of the 21st century.[202] Climate change should be an issue which transforms the way DFID works in developing countries. Yet seven years after our predecessors' report on this subject we find that DFID still does not have an overall framework for addressing the impacts of climate change on the countries most at risk.

157. Developing countries will need significant assistance to adjust to the impact of climate change. This in turn will require effective and additional finance both in the near term and in the future. In the current economic climate this will be a challenge but, as we said in our recent Report on *Aid under Pressure*, it is even more important given the increased vulnerability which the economic downturn has caused in poor countries. DFID's forthcoming White Paper should address the issues of climate change directly and give a clear commitment that the UK will do its part to provide the necessary additional funding for mitigation and adaptation, to promote low carbon growth and to secure livelihoods in an increasingly fragile environment.

158. The UNFCCC climate change conference in December offers an important opportunity for the world to act now to prevent a more dangerous climate for future generations. We expect the Government to show leadership in working towards an agreement by adopting positions which are equitable and work in the interests of the world's poorest people.

201 UNDP, *Fighting Climate Change, Human Development Report 2007/08*

202 Nicholas Stern, *The economic crisis and the two great challenges of the 21st century*, a speech delivered at the DFID Conference on Securing our Common Future, 9 March 2009

Conclusions and recommendations

DFID's approach to sustainable development and climate change

1. We are disappointed that DFID could not provide us with more evidence of progress it has made since 2002 towards fully integrating climate change into its poverty alleviation programmes, especially in Africa. DFID's programme in Bangladesh, which seeks to combine climate change and development objectives in practical ways, its pilot climate screening project and its assistance to the government to develop a Climate Change Strategy are steps in the right direction. At present, however, they appear to be one-off projects rather than clear evidence of a mainstreamed approach. We believe that such initiatives should become the norm throughout DFID's country programmes. The Department should be able to demonstrate much more clearly that climate change is informing its policy decisions in all the countries in which it works. We invite the Secretary of State, in responding to this Report, to set out the steps planned to achieve this. (Paragraph 16)

2. We support the focus in DFID's Sustainable Development Action Plan on ensuring that sustainability is at the centre of the Department's development work and that development objectives are reflected in both domestic and international sustainability policies and programmes. We were, however, surprised that the Minister was unable to tell us more about how the Plan influenced DFID's work in practice. There is a need for greater coherence across Government on sustainable development. In an increasingly inter-dependent world DFID needs to work more closely with other Government Departments, particularly Business, Enterprise and Regulatory Reform, to increase their awareness of the international dimensions of sustainable development. The UK's Sustainable Development Commission has not been engaged meaningfully in international development issues and could contribute more in this area. It should have an international as well as a domestic focus. We welcome the commitment from the Minister of State for Sustainable Development to review the focus of the Commission. We request that the Government, in its response to this Report, provides an update on progress with this review. (Paragraph 20)

3. We are encouraged by the Government's strong position on emissions reductions adopted in the lead-up to the UN Framework Convention on Climate Change conference in December. We believe that this will provide greater leverage in encouraging other industrialised countries to make similar commitments. It is, however, critically important that the UK makes progress towards meeting its own targets. Failure to do so risks not only dangerous climate change but might well also undermine global resolve to tackle the problem. (Paragraph 29)

Linking climate change and development

4. We welcome the creation of the Department for Energy and Climate Change. We expect it to improve the coherence of the Government's response to climate change. Addressing the impact of climate change in developing countries should not be

viewed as the sole responsibility of DFID. Other Departments, such as Business, Enterprise and Regulatory Reform, the Home Office and the Foreign and Commonwealth Office, have roles to play. There are important linkages which can be made between mitigation policies in the UK and adaptation policies in developing countries which a more coherent Government approach would strengthen. (Paragraph 38)

Development in a hostile climate

5. DFID should set out clearly how it intends to ensure that climate change forms an integral part of all its country programmes. In particular, greater clarity is needed on how DFID plans to scale up one-off projects which seek to build resilience amongst local communities and ensure lessons learned from them are communicated widely and acted upon. (Paragraph 43)

6. We welcome DFID's support for initiatives such as the Climate Change Adaptation in Africa Programme and the Africa Climate Policy Centre which are making a valid contribution to African-led research. DFID should also be commended for its support for funding streams and pilot programmes which aim to promote climate resilience, although we note that it will be some time before these can be evaluated and built upon. The capacity of developing countries to tackle climate change needs to be strengthened through support for national and multi-stakeholder dialogues and for the further development of National Adaptation Programmes of Action. We request that DFID, in response to this Report, provides more information on how these key elements of its climate change work will be funded and taken forward. (Paragraph 47)

Economic growth and natural resource management

7. Economic growth cannot be sustained unless it takes into account the proper value of the resources upon which it depends. Conservation and preservation of natural resources are therefore contributors to sustainable development. DFID has not been directly involved in the marine or forestry sectors for some time and yet they are vital to poverty reduction in some countries. We believe that the Department needs to begin to re-establish its engagement in them. DFID has a water resources management strategy. It should also now urgently consider developing marine and forestry management strategies. The potential for development in these sectors should also be included in the work of the new International Growth Centre. (Paragraph 51)

Funding adaptation

8. Estimates of the cost of adaptation vary widely. Funding sources are currently inadequate and the implications of the global economic downturn for the availability of future funding have not yet been properly assessed. We believe DFID should make clear its own plans for expenditure on climate change measures and that it should encourage other donors to do the same, in advance of the Copenhagen conference in December. (Paragraph 60)

9. We support Lord Stern's call for an increase in the percentage of gross national income which donors allocate to assistance to poor countries to fund adaptation. Adaptation represents an additional cost for developing countries which have made negligible contributions to greenhouse gas emissions. We believe that developed countries, who bear the greatest responsibility for climate change, should therefore provide new, additional and predictable financial flows to assist poor countries to tackle its impacts. DFID must take the lead on making clear its commitment to the principle that climate change funding will be additional to its existing pledges on official development assistance. The UK will then be in a strong position to exert pressure on the international community to adopt this approach. (Paragraph 61)

10. The Government has allocated £800 million from the Environmental Transformation Fund (ETF) to be used for climate change work as part of the World Bank's Climate Investment Funds. This is a substantial sum of money and it is important that the way it is spent is properly scrutinised to ensure that it is achieving its intended objectives. We request that, in response to this Report, DFID provides us with an evaluation of the use of this ETF expenditure to date, including how it is contributing to poverty reduction, and that this information is regularly updated. (Paragraph 65)

11. Donors cannot and should not manage developing country government budgets. It is, however, important that donors work with partner governments to establish mechanisms which would help to provide greater certainty that the large sums of money allocated for adaptation to climate change are used effectively for this purpose. We believe DFID should apply the same rigour to this as it seeks to put in place for development assistance expenditure. We request that, in response to this Report, DFID provides further information on the monitoring and evaluation mechanisms which it has or plans to put in place to ensure that adaptation funding is used for its intended purposes. (Paragraph 67)

Aviation emissions

12. An air travel levy aimed at reducing aviation emissions is likely to have a greater impact on behaviour in relation to short-haul flights because travellers have more choice of alternative modes of transport for short journeys. Air passenger duty may influence a decision about whether to fly to Paris but not to Tanzania, for example. Taxation could therefore be a useful tool for changing behaviour and reducing emissions in relation to short-haul flights but is less likely to have a similar impact on long-haul journeys. (Paragraph 73)

13. We believe that an international aviation levy would be a welcome additional source of funds for adaptation. The International Civil Aviation Organisation may be successful in securing agreement for its proposed scheme, which it is estimated could raise up to $10 billion a year. However, if there seems to be insufficient progress in this forum, we recommend that the UK Government consider supporting the Group of Least Developed Countries' proposal for a similar scheme, as part of the measures to be discussed at the Copenhagen summit. (Paragraph 76)

14. **We are concerned about a possible decrease in the number of UK tourists visiting developing countries which an increase in air passenger duty might cause. We therefore also recommend that, for flights originating in the UK, compensation is given for any new Adaptation Levy on an economy fare by making an equivalent reduction in the UK air passenger duty for passengers travelling to long-haul destinations in developing countries. This could form part of any new financial commitment under the Copenhagen agreement.** (Paragraph 77)

Tourism

15. **We understand that it is not possible for DFID to be involved in every sector in developing countries and appreciate that tourism may be an area where it feels it no longer has a comparative advantage. However, given the economic importance of the tourism industry to so many developing countries in which DFID has a programme, and its inclusion in many Poverty Reduction Strategy Papers, the Department cannot afford to ignore it. Capacity-building in the sector, including training and development for local employees, could form part of DFID's livelihoods and growth programmes in countries where tourism makes, or has the potential to make, a significant contribution to the economy.** (Paragraph 89)

16. **We accept the argument that it is important for the UK to maintain its engagement with the UN World Tourism Organisation. If the Department for Culture, Media and Sport is not able to continue to find the membership fee, we believe that DFID should take this over. We believe that membership of the UN World Tourism Organisation would sit comfortably within DFID's remit and would enable it to influence wider debates on the contribution that tourism can make to poverty reduction and on the need for the tourism sector to address climate change.** (Paragraph 91)

Food and horticulture exports from developing countries

17. **There is a danger that steps taken by consumers in the UK to reduce their contribution to carbon emissions may lead them to avoid buying produce from developing countries in the mistaken belief that air-freighted food and flowers necessarily have a higher carbon footprint. We believe that consumers need accurate information about the way products have been grown as well as transported. Labelling imported fresh produce to show total carbon emissions for the whole production cycle would be a useful tool to enable consumers to make informed choices about the goods that they buy. We believe the UK Government should conduct research on how such a scheme might be introduced and carry out an assessment of the potential benefits to producers in developing countries.** (Paragraph 100)

18. **The Government could also consider paying to offset the air freight emissions of horticultural products from developing countries. Ideally this would be done through funding sustainable mitigation projects in the exporting countries, which would provide poor countries with a double dividend of supporting their export earnings and contributing to their domestic low-carbon development. This proposal could be a worthwhile use of funds, particularly if it could be counted against**

compliance with any financial commitment made as part of a new global agreement reached at the Copenhagen summit. We therefore recommend that the Government explore its feasibility prior to the Copenhagen conference and report back to us on its conclusions. (Paragraph 101)

Towards low carbon development

19. We are pleased that DFID has begun to engage in research on low carbon development paths. There is a pressing need for more research into options for low-income countries. We believe that DFID should build this capacity in developing countries and facilitate greater research collaboration between them. We welcome the establishment of the Centre for Climate and Development and recommend that its remit include development of knowledge which is relevant to, and driven by demand from, low-income countries. (Paragraph 113)

20. We appreciate that the Clean Development Mechanism is a relatively new mechanism and that there are bound to be teething problems. However these need to be resolved urgently. The CDM has the potential to make a significant contribution to emissions reductions in developing countries but to date it has had little impact in poorer developing countries and there are few projects in Africa outside South Africa. The geographical distribution of CDM projects needs to shift towards Africa in any new iteration of the Mechanism. Proposals to reform the CDM should have this as a primary objective. We recommend that DFID consider funding appropriate demonstration projects in Africa to encourage this. "Additionality" of projects also needs to be properly defined to help provide confidence that the Mechanism is achieving its objectives. We are also cautious about a mechanism which could be seen purely as a technical solution to harmful emissions. If developing countries are to benefit, and if the sustainable development objectives of the UNFCCC are to be met, the CDM should be more closely linked to poverty reduction strategies in developing countries. We believe that DFID should seek to address these issues at the Copenhagen conference. (Paragraph 124)

21. The transfer of low carbon technologies to developing countries is essential if they are to avoid high carbon growth. Greater effort is required to ensure that the benefits of rapid technical progress in developed countries are shared with developing countries, where such technologies are appropriate. Facilitating appropriate low carbon technology in developing countries is an initiative which offers potential for a joined up UK development and trade policy approach and is one which the Government should explore. The private sector has an important role to play and should be encouraged to participate. We recommend that DFID examine how it can work with the Department for Business, Enterprise and Regulatory Reform to establish a programme to facilitate UK private sector involvement in low carbon technology transfer to poor countries. (Paragraph 130)

Meeting the energy needs of the poorest

22. It is inevitable that many developing countries will continue to rely on fossil fuels and biomass for their energy requirements for some time to come. However these countries are historically low emitters and equity demands that they should be permitted to ensure that the poorest people are able to meet their basic energy needs even where this relies on high carbon methods. Emphasis on low carbon growth should not take precedence over ensuring developing countries can tackle more immediate social needs. Small-scale initiatives such as the jatropha fuel project we saw in Kenya provide innovative opportunities to improve the livelihoods of the poorest whilst meeting their energy needs in a sustainable manner. Scaling up such small-scale projects and replicating them across developing countries is the next essential stage and requires the support of donors, including DFID. (Paragraph 135)

23. Meeting the energy needs of the poorest in a sustainable way means that low carbon technologies must be made available, free or at a low cost with high incentives, to the poorest and most vulnerable. This includes biofuel technologies where opportunities exist to develop these sustainably and without negative repercussions on food security. We understand that more research is needed into how best to ensure low carbon technology and know-how is transferred from developed to developing countries, and between developing countries. Methods of scaling-up from pilot projects to commercialisation also needs examination. This research should form part of the remit for DFID's new Centre for Climate and Development and where possible should be undertaken in developing countries. While many developing countries are currently low emitters it is important that research is carried out quickly so that it is available as they begin to move towards increased industrialisation. (Paragraph 138)

The Copenhagen conference

24. It is vital that rich countries set very rigorous targets for reducing their greenhouse gas emissions. These countries bear primary responsibility for current levels of gases in the atmosphere. Emerging economies and industrialising countries will also need to take actions but these should be proportionate to their historic level of emissions. The principles of reducing global emissions and sharing common but differentiated responsibility should provide the over-arching framework for the UK's negotiating stance in Copenhagen. (Paragraph 148)

25. We are concerned however that only months away from the Copenhagen conference many countries are unwilling to put figures on the table. The Government should take a strong lead in encouraging other high emitters to take the tough decisions necessary. The EU is apparently waiting to see what others do before making a commitment to the stringent targets which are deemed necessary. We understand that this is a negotiating tactic, but consider it to be a high-risk strategy. Too many important decisions are being left until the last minute, with the danger that agreement may not then be secured. A commitment to achieving a successful outcome and a willingness to be flexible must be demonstrated by all parties, including the UK and the EU. The UK should put pressure on its EU partners to make progress on establishing an agreed negotiating position now. (Paragraph 149)

26. We are pleased that industrialising countries such as China are beginning to consider appropriate mitigation actions. The UK Government should encourage such initiatives. As we said in our recent report into DFID and China "the path that China chooses, in terms of carbon emissions, energy use and its sourcing of natural resources, will strongly affect the international community's efforts to address climate change." **We recommend that DFID ensure that the new Centre for Climate and Development includes research and policy analysis on climate change in China as one of its focus areas.** (Paragraph 152)

27. **Establishing the principle of additional funding for adaptation is crucial to securing agreement in Copenhagen. We appreciate that it may be too sensitive for developed countries to make firm commitments at this stage, but the UK Government should show moral leadership and confirm that it will indeed be putting new funding on the table in Copenhagen. This would send out an important signal to poor countries that the developed world is prepared to meets its responsibilities towards them. It might also encourage other donors to be equally bold in fulfilling their clear obligations on adaptation costs.** (Paragraph 155)

Annex: Committee's Visit Programme in Kenya and Tanzania

The Committee visited Kenya and Tanzania from 17-26 March.

Members participating**:** Malcolm Bruce (Chairman), Hugh Bayley, Richard Burden, Mr Mark Hendrick, Daniel Kawczynski, Mr Marsha Singh

Accompanied by**:** Carol Oxborough (Clerk), Anna Dickson (Committee Specialist).

KENYA

NAIROBI

Tuesday 17 March

Briefing from DFID and FCO officials

Lunch meeting with Angela Cropper, Deputy Executive Director, United Nations Environment Programme (UNEP) and UNEP officials

Meeting with Inga Bjork-Klevby, Deputy Executive Director, United Nations Human Settlements Programme (UN-Habitat) and UN-Habitat officials

Wednesday 18 March

Meeting on climate change with:

- Emily Massawa, Consultant for UNEP and former Kenyan Government representative at climate change negotiations
- Professor Richard Odingo, Chairman, National Climate Change Activities Coordinating Committee and former Vice-Chairman of the IPCC
- Dr Maggie Opondo, Senior Lecturer and Researcher, Department of Geography and Environmental Studies, University of Nairobi
- Adriaan Tas, Stockholm Environment Institute (conducting mini-Stern Review)
- Basra Ali, Redco Kenya

Lunch meeting with Hon Mohamed Ibrahim Elmi, Minister for North Kenya and the other Arid Lands

Briefing from International Development Research Centre

NAIVASHA

Thursday 19 March

Field visit to Oserian flower farm

Field visit to IDP camp (set up after post-election violence)

NAIROBI

Friday 20 March

Meeting with Civil Society Climate Change Network

Working lunch with the International Livestock Research Institute (ILRI)

Meeting with the Hon Kenneth Otiato Marende, Speaker of the Kenyan Parliament

Saturday 21 March

NORTHERN KENYA

Field visit to DFID-funded projects led by the Solidarités NGO in North Horr, Arid and Semi-Arid Lands

NAIROBI

Working Dinner with Dr Akin Adesina, Vice-President and Barbara Noseworthy, Senior Resource Mobilisation Officer, Alliance for the Green Revolution in Africa (AGRA)

TANZANIA

ARUSHA

Sunday 22 March

Field visit to Arusha National Park

Working dinner with representatives of Tourism Confederation of Tanzania and tour operators

Monday 23 March

Meeting with Gerald Bigurebe, Director-General, Tanzania National Parks agency (TANAPA) and other TANAPA officials

Working lunch at Tengeru Cultural Tourism Centre

Working Dinner with the Tanzania Natural Resources Forum (TNRF)

KILWA

Tuesday 24 March

Lunch briefing from WWF on Rumaki Seascape Project and Village Community Banks (VICOBA) project

Field Visit to Somanga Village: meetings with village VICOBA groups and Beach Management Unit groups

Dinner briefing and discussion with WWF

Wednesday 25 March

WWF briefing on the Forest Management Programme in the Rufiji District and the Mpingo Conservation Project

DAR ES SALAAM

DFID briefing on General Budget Support (GBS)

Meeting with GBS donor partners:

- Jesper Kammersgaard, Danish Ambassador
- Jon Lomoy, Norwegian Ambassador
- John McIntire, World Bank Country Director – Tanzania, Uganda and Burundi

Meeting with Chairs of Oversight Committees of Tanzanian Parliament

- Mr John Cheyo MP, Chair of the Public Accounts Committee
- Dr Abdallah Kigoda MP, Chair of the Finance and Economic Affairs Committee

Thursday 26 March

Meeting with Mr Mustafa Mkulo, Minister of Finance and Economic Affairs and Ministry officials

Meeting with officials from the Ministry of Natural Resources and Tourism

Meeting with Wildlife Conservation Society of Tanzania (WCST)

Meeting with Development Partners on Environmental Issues

- Mr Ivar Jorgensen, Counsellor on Climate Change and the Environment, Norwegian Embassy
- Christian Peter, World Bank
- Simon Milledge, independent consultant

Formal Minutes

Wednesday 20 May 2009

Members present:

Malcolm Bruce, in the Chair

John Battle
Richard Burden
Mr Virendra Sharma
Mr Marsha Singh
Andrew Stunell

Draft Report (*Sustainable Development in a Changing Climate*), proposed by the Chairman, brought up and read.

Ordered, That the Chairman's draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 158 read and agreed to.

Annex and Summary agreed to.

Resolved, That the Report be the Fifth Report of the Committee to the House.

Ordered, That the Chairman make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

Written evidence was ordered to be reported to the House for printing with the Report, together with written evidence reported and ordered to be published on 14 and 21 January 2009.

[Adjourned till Tuesday 2 June at 9.30 am

Witnesses

List of written evidence

List of Reports from the Committee during the current Parliament

The reference number of the Government's response to each Report is printed in brackets after the HC printing number.

Session 2008-09

First Report	Work of the Committee in Session 2007-08	HC 138
Second Report	DFID Annual Report 2008	HC 220 (HC 440)
Third Report	DFID and China	HC 180-I&II
Fourth Report	Aid Under Pressure: Support for Development Assistance in a Global Economic Downturn	HC 179-I&II

Session 2007-08

First Report	DFID Departmental Report 2007	HC 64–I&II (HC 329)
Second Report	Development and Trade: Cross-departmental Working	HC 68 (HC 330)
Third Report	Work of the Committee 2007	HC 255
Fourth Report	Reconstructing Afghanistan	HC 65–I&II (HC 509)
Fifth Report	Maternal Health	HC 66–I&II (HC 592)
Sixth Report	DFID and the World Bank	HC 67–I&II (HC 548)
Seventh Report	DFID and the African Development Bank	HC 441–I&II (HC 988)
Eighth Report	Scrutiny of Arms Export Controls (2008): UK Strategic Export Controls Annual Report 2006, Quarterly Reports for 2007, licensing policy and review of export control legislation	HC 254 (Cm 7485)
Ninth Report	Working Together to Make Aid More Effective	HC 520–I&II (HC 1065)
Tenth Report	The World Food Programme and Global Food Security	HC 493–I&II (HC 1066)
Eleventh Report	The Humanitarian and Development Situation in the Occupied Palestinian Territories	HC 522–I&II (HC 1067)
Twelfth Report	HIV/AIDS: DIFID's New Strategy	HC 1068-1&II (HC 235)

Session 2006–07

First Report	DFID Departmental Report 2006	HC 71 (HC 328)
Second Report	HIV/AIDS: Marginalised groups and emerging epidemics	HC 46-I&II (HC 329)
Third Report	Work of the Committee in 2005–06	HC 228
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