

SUSTAINABILITY AND SOCIAL JUSTICE

Edited by Julie Foley





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Rt Hon Margaret Beckett MP

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Foreword

There are powerful synergies between sustainable development and social justice at the community level, nationally and in the international arena. They deserve greater attention and a deeper understanding. So I warmly welcome this report from the Institute for Public Policy Research. Bringing together social and environmental concerns is vital if we are to achieve our social and environmental goals at home and abroad.

The report primarily highlights the linkages at national and community level. It shows that linking social and environmental policy is necessary for two reasons. Firstly, to ensure we genuinely tackle the root causes of ill-health, poverty and disadvantage. Secondly, to deliver significant economic and social dividends in the form of jobs, economic progress and stronger communities.

Achieving our environmental objectives can deliver economic benefits at the national and local level. Energy, waste, food and farming are highlighted as areas in which these links apply. Our energy efficiency policies have already yielded tremendous savings for British business, and there are more to come. Here and elsewhere, there are opportunities to support and benefit from clean technologies, environmental regeneration and new forms of environmental enterprise.

These linkages are also apparent at community level. There are powerful connections between our health and well-being and the quality of the environment. Energy efficient homes, accessible green spaces, clean air and water and access to healthy food all contribute to healthy lifestyles and improved life-chances. Clean, green and attractive neighbourhoods foster safe and strong communities, and improve the quality of life. Central government cannot transform neighbourhoods from Whitehall alone. But we are working with local government, communities and others to make this a reality.

At the international level, the connection between poor environments and poverty can all too readily be seen. The UK has taken a lead in forging agreements which link together issues of poverty and environmental degradation. The Millennium Development Goals and World Summit on Sustainable Development commitments are central to this approach. It is crucial that the international community works to deliver on these commitments, and the UK is leading efforts to ensure that we do so.

Tackling environment and poverty together is not just in the interest of international development. It is a pre-requisite to a safer, more secure world. Sustainable development is essential to long term peace and security. As the head of the World Bank has said, the idea that a rich world and poor world can coexist without dramatic implications is untenable. So we must with equal vigour address the underlying causes of conflict and instability: poverty and environmental degradation.

Climate change is the most compelling and pressing example of the links between social and environmental goals at the international level. The United Nations Framework Convention on Climate Change (UNFCCC) has estimated that African Gross Domestic Product may fall by four per cent for every one degree Celsius rise in global temperatures. So it is vital for our aspirations for Africa and the developing world that there is international progress in tackling climate change.

Making these links cannot be left to chance. They need to be built-in to policy making and delivery at all levels. There are important messages in this report for government departments as well as for other national, regional and local stakeholders. Environment and social justice is a key theme in the current UK Sustainable Development Strategy, which provides us with a real opportunity to deliver our social and environmental goals in an integrated way.

This approach is a challenging one for all those who wish to pursue it. It requires collaborative working, robust evidence, smart interventions, and the tools to empower communities to make a difference. After all, it is often local communities who can most clearly see the links between their well-being and their environment.

The pursuit of synergies with our social and economic objectives is vital to the Government's environmental agenda. In the past, there has been a perception that environment and social goals may be mutually exclusive or even in conflict. This report helps us move beyond this view to one which identifies many positive synergies between the two, at all levels. I hope that it provokes many more people into considering how they can take forward its conclusions.

Rt Hon Margaret Beckett MP
Secretary of State for the Department of
Environment, Food and Rural Affairs (DEFRA)

1. Overview

Julie Foley

When the late John Smith established ippr's 1994 Commission on Social Justice, there was a clear political need to set out a vision of a future based on socially just values. The Commission's work helped to influence the climate of policy ideas as well as the Labour Party's 1997 manifesto. The rest is now history. After nearly two terms in power, the Government is looking to revisit its strategies for national renewal. There are many tough challenges ahead and the Government has already identified headline policies for raising education attainment, improving health services and tackling child poverty. Sustainable development rarely gets the political attention it deserves, yet issues relating to the environment and quality of life affect nearly every area of public policy.

Sustainable development and social justice are both widely regarded as desirable goals, and there is growing political interest about the degree to which they are compatible. It is becoming more widely recognised that social inequalities are among the causes of environmental degradation. Moreover, it is becoming more widely understood that environmental problems disproportionately affect the poor. This edited collection considers the extent to which the Government has grasped the links between sustainability and social justice with contributions from leading environmental commentators and organisations. It identifies where the opportunities and potential trade-offs lie and how the Government can better reconcile economic, social and environmental concerns.

The Government has made some important in-roads in helping to integrate sustainable development across Whitehall. The Treasury has advanced the use of environmental taxes and charges for enforcing the 'polluter pays principle' and encouraging more sustainable consumption and production of resources. The 2003 Energy White Paper put climate change at the heart of energy policy with a commitment to promoting renewable electricity use and greater energy efficiency. UK Environment Ministers have led the way in Europe in pushing for reform of the

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Common Agricultural Policy and shifting subsidies towards more sustainable forms of agriculture.

However, in other policy areas, such as transport and planning, the Government's performance has been less impressive. It has not managed to reverse the trend towards faster, longer distance transport, mainly made by car, away from local modes like walking, cycling and taking the bus. Like administrations before it, this Government has struggled to handle accusations by the motoring lobby and the media that any environmental policies are simply 'anti-motorist.' Demand for both road and air travel continues to grow, posing a challenge to the Government's own targets for reducing pollution and congestion. The Office of the Deputy Prime Minister (ODPM) has championed proposals for building a greater number of new homes in growth areas, such as the South East of England. It is unclear whether the provision of transport, water and waste management services will be able to keep pace with the rate of housing growth. Little thought appears to have been given to the potential impacts on the local environment and quality of life of communities.

The common ground between sustainable development and social justice

Social justice is broadly about the distribution of benefits and burdens. The Commission on Social Justice highlighted several essential values of social justice: the equal worth of all citizens, their equal right to be able to meet their basic needs, the need to spread opportunities and life chances as widely as possible, and finally the requirement that we reduce and where possible eliminate unjustified inequalities (ippr 1994). The Commission examined issues relating to poverty, unemployment, poor education and ill health but neglected to look at issues relating to the environment and sustainable development. This may have been because some environmental issues do not naturally find a home within the political concerns of those on the social democratic left. For instance, the countryside, wildlife habitats and endangered species are generally viewed by society as having a value in their own right. But concerns for their protection tend to sit more comfortably with middle class, more 'conservative' interests. For progressive policy makers, it is the interaction between people and the environment that offers greater

political appeal. The impact that people have on their environment and conversely the impact that environmental problems have on people is therefore the focus for the discussion in this report.

Most political philosophers have traditionally viewed issues relating to sustainable development separately from social justice. John Rawls does, however, make room in his classic book *A Theory of Justice* for environmental measures that serve to control the negative externalities that one individual may impose on others (Rawls 1973). For example, if a person chooses never to recycle, then he or she is adding to costs of waste management imposed on society. By the same token, if a person decides to drive into work each day during the peak morning rush hours, then he or she is adding to the congestion and pollution problems experienced by others. Rawls' theory could be seen as justifying the need for policies that influence individual behavioural choices. But, the role that politicians can and should have on changing individual behaviour is politically contentious as illustrated by the debates surrounding the use of road user charging and charging for household waste. Many environmentalists would, however, view this as just one dimension to the way in which conceptions of sustainable development and social justice are compatible.

Within the last few decades, the concept of 'environmental justice' has emerged although it has received greater recognition in the United States than here in the UK or Europe. In the US, the environmental justice movement emanated from a number of high profile environmental incidents that had serious health consequences for local communities. It can be traced back to events such as in August 1978 when the CBS and ABC networks carried new stories of the effects of toxic waste on the health of people living around the Love Canal. It later emerged that toxic chemicals, dumped there twenty years earlier, had been washed to the surface by heavy rains causing alarming health problems such as birth defects (Dobson 1998).

Environmental justice does not just refer to justice to the environment in the ecological sense of protecting the use of land and renewable resources in the interest of a sustainable planet for people and other living things. It also refers to the just distribution of environmental 'goods' and 'bads' amongst human populations (Miller 1999). Environmental goods can refer to necessities such as water resources as well as access to environmental assets that have wider quality of life

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benefits such as access to parks. Environmental bads can refer to the impacts of environmental degradation and unsustainable use of natural resources such as pollution or the loss of countryside areas.

The connection between environmental protection and distributive justice should underpin our modern day understanding of sustainable development. Importantly, it is becoming more widely understood that poorer people tend to suffer disproportionately from the effects of environmental problems. Furthermore, how we respond to these problems is also generally influenced by our ability to pay for protection which means that the poor tend to lose out. This is strikingly illustrated by the effects of climate change which is already creating social injustices in both developing and developed nations. The poorest and most vulnerable populations are nearly always the most severely affected by the effects of weather related hazards such as flooding and droughts.

There are many definitions of 'sustainable development' and so the extent to which it is deemed to be compatible with social justice values depends on what one understands sustainable development to mean. The Brundtland report for the 1987 World Commission on Environment and Development (WCED) proposed that sustainable development should refer to: 'development that meets the needs of present generations without compromising the ability of future generations to meet their own needs' (WCED 1987). From this definition has sprung the concept of 'thinking globally, but acting locally' which calls on every person to think about how their individual behaviour and consumption choices can positively contribute to a more environmentally sustainable world.

The Brundtland definition has stood the test of time and is taught to school students throughout the world. At the heart of this definition of sustainable development is the case for intra-generational and inter-generational equity in terms of the distribution of rights and opportunities to environmental resources. The Brundtland definition recognises that every individual, both within present and future generations, has claims of justice to resources and environmental goods that will be denied if existing patterns of consumption and development are allowed to continue (Miller 1999). Given the synergies between sustainable development and social justice it is somewhat surprising to find that there is still a low level of political awareness about the parallels between the environmental justice movement and theories of social justice.

The challenges ahead

The authors of this report analyse the record of the Government since 1997 in six key policy areas. The report considers the links between sustainable development and social justice across society: at the global, national and local levels. Firstly, Graham Duxbury of Groundwork UK considers how we should go about regenerating deprived communities and assesses the impact of the Government's Sustainable Communities plan. Tony Grayling of ippr examines the implications for social justice in an increasingly mobile society within the context of the Government's Ten Year Plan for Transport. Tony Juniper of Friends of the Earth makes the case for strengthening the link between climate change and international development policy. In my chapter, I discuss the potential social justice issues that could emerge from the delivery of the Government's Energy White Paper ambitions to improve renewable electricity use and energy efficiency. Simon Dresner and Paul Ekins of the Policy Studies Institute highlight that the growth in household waste is unsustainable and identify policy options for better combining sustainability and social justice. Finally, David Baldock of the Institute for European Environmental Policy outlines recent developments in agricultural policy and the potential social justice tensions that could arise from the higher costs of more environmentally sustainable farming and food production.

Whilst in theory there is much common ground between sustainable development and social justice, the authors recognise that in practice there can potentially be some trade-offs. The opportunities and challenges that are identified in this report can be thought of in terms of four broad themes.

Promoting the just distribution of environmental goods and bads

In international development debates, it is widely recognised that greater equality will lead to a more secure environment. In developing countries, environmental issues are so bound up with issues of poverty and distributive justice that they are almost indistinguishable. The Brundtland report stated that 'poverty itself pollutes the environment' and that those who are poor and hungry will often destroy their immediate environment to survive (WCED 1987). In the UK, a similar

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dynamic is in play with our poorest communities often most affected by environmental problems. Research shows that industrial sites are disproportionately located in deprived areas (Walker *et al* 2003) and children in deprived areas are five times more likely to be killed by cars than those in affluent areas (Grayling *et al* 2002). According to the Department of Health (DoH) the gap in mortality rates between different social groups has increased almost two and a half times since the 1930s with a major factor being where people live (DoH 2003). There needs to be greater integration of environmental and poverty concerns when developing local regeneration strategies.

Graham Duxbury recognises that the just distribution of environmental goods could also support the delivery of public health objectives as a sustainable community should also be a healthier community. The Wanless report on public health, for HM Treasury, highlighted concerns about the growing rate of obesity in the UK especially amongst young children and teenagers (Wanless 2004). For much of this Government's time in office, the debate on the nation's health has focused on pumping money into front-line services especially in the acute, hospital sector. However, little attention has been given to the environmental causes underlying ill health. In deprived communities, lack of access to environmental goods such as clean air and green spaces can often exacerbate respiratory diseases, like asthma, and other health problems such as obesity. The Government has yet to recognise adequately that looking after and making better use of the local environment can help to improve public health outcomes.

Ensuring environmental policies are socially just

Environmental economists have long argued for 'internalising environmental externalities', such as pollution, into the costs of goods and services. This Government has explored the use of various charging and taxation measures as a means of putting a market value on environmental costs and encouraging greater resource efficiency. The impacts of these kinds of measures are, however, not neutral across society as the costs will tend to fall more heavily on some people more than on others, and the environmental benefits will tend to advantage some more than others. Progressive policy makers are often cautious about environmental charges or taxes on social equity

grounds in terms of their potential impacts on low income individuals or households.

The success of the central London congestion charge, introduced in February 2002, has changed the terms of the political debate on road user charging. The scheme has been criticised as pricing the poor off the roads. But Tony Grayling argues that the London congestion charge has been broadly progressive because the charge mainly falls on businesses and people on higher incomes who benefit from less congestion. In addition, most Londoners on low incomes do not own a car but get about by foot and public transport. If a national congestion charging scheme were to be rolled out nationally, then there could be social equity concerns for low income households in rural areas. Rural households tend to be poorly served by public transport, can spend up to a quarter of their disposable income running a car and would probably find it hard to manage without one. There are ways of reconciling this; if the charges were varied according to the level of congestion, then they would be much lower on rural roads that have less traffic than congested urban areas and motorways. The progressive nature of congestion charging could also be reinforced if a proportion of the money raised was earmarked for local transport improvements. In London, Ken Livingstone has pledged to use some of the money raised from the congestion charge to pay for more reliable, higher quality buses that are generally used by people on lower incomes.

The Government has so far been unenthusiastic about the idea of charging households according to how much waste they produce partly because of the potentially negative impacts variable charging could have on poorer households. Like Tony Grayling, Simon Dresner and Paul Ekins argue that social equity concerns need not be a political barrier to environmental charges as long as they are carefully designed. They argue that any regressive impacts from variable charging for household waste could be dealt with through a mechanism using tax credits and benefits to compensate poorer households that might otherwise be worse off.

Some progressive policy makers view the protection of civil liberties as a stream of social justice. But enacting policies on environmental grounds could potentially pose a threat to peoples' liberties in some respects. This, for example, has been a particular concern relating to the technology options available for introducing road user charging. The

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Government appears to be interested in using global satellite tracking technology that can pinpoint a vehicle's location on any road at any time of the day. Whilst the use of satellite technology would aid the enforcement of road user charging schemes, there have been concerns that using such technology could be an infringement on civil liberties with the media describing it as a 'spy in the car.' If tracking technologies are to be used then safeguards to protect peoples' liberties will be important.

Balancing the rights of individuals versus wider society

One of the dilemmas that can face progressive policy makers is how to balance the rights of individuals against the rights of wider society. In my chapter, I highlight this dilemma in terms of the debates surrounding planning applications for onshore or near-shore wind developments. In many cases, the Government is faced with the decision of either siding with the developer or with local communities that may be concerned about the possible visual intrusion of wind farms. It would be unhealthy for local democracy if a precedent was set that local views should not be accounted for when assessing planning applications for major developments such as wind farms. It is too simplistic to dismiss local concerns as mere 'nimbyism.' In some cases, however, the Government may need to make tough choices about whether the anti-wind attitudes of a vocal minority should over-ride national and international interests to encourage renewable electricity generation and reduce greenhouse gas emissions.

Balancing the rights of individuals and wider society could also become an issue within agricultural policy. David Baldock argues that supermarkets currently do not reflect the full cost of food production. He suggests that food prices should be high enough to reflect the costs of complying with environmental, food safety and animal welfare standards. Poor farming and land management currently causes millions of pounds worth of damage to natural resources such as water and soil. The Government's *Strategy for Sustainable Farming and Food* (DEFRA 2002) encourages the shift away from the historical tradition of rewarding subsidies according to levels of production towards farming practices that promote environmentally sustainable production, a policy that will be beneficial to society as a whole. But as we move to more

sustainable systems, less reliant on agro-chemicals, that promote good farm management, the costs of production will inevitably rise. If some of the costs are passed onto consumers at the retail level, then there could be concerns for individuals on low incomes less able to bear the higher costs of more environmentally sustainable farming and food production.

Protecting the development choices of future generations

It has already been noted that the poor and vulnerable will have the most to lose from the continued effects of climate change. Tony Juniper recognises that while inequitable access to food is a major factor in fuelling world hunger, climate change is also undermining food security in places such as sub-Saharan Africa. He highlights the growing consensus that a rapidly changing climate in Africa could be highly damaging to development. The Kyoto Protocol was built on the principle that developed countries should bear more of the historic responsibility for climate change and should adopt targets to cut their greenhouse gas emissions before developing countries. In practice, however, the politics of winning support for the Kyoto Protocol has been difficult with countries such as the United States refusing to ratify the treaty leaving the process in a log jam.

Going a step further and arguing that developed societies, such as our own, should change our patterns of consumption to protect the development choices of future generations is an even harder case to win. Climate change is an example of an environmental issue that can fall victim to the short term politics of electoral cycles. Yet, the environmental consequences of the development pathways we take today have the potential to affect the development choices open to generations in decades to come.

Climate change also poses tough questions for the development choices of developing countries. Millions of people live without access to adequate energy services either because they live in remote areas or because they are too poor to pay for services on offer which is in itself socially unjust. But Tony Juniper argues that this need must not be met at the expense of global climatic stability. He suggests that renewable energy has considerable potential to meet future energy needs and will be essential if increased use of energy in developing countries is not to worsen greenhouse gas emissions. Whilst developing countries would

not want to be denied options that are available to developed countries, there is a risk that fossil fuel dependency could push developing countries into development paths that will neither be environmentally sustainable nor meet the long term needs of generations to come. Building the social justice case for adopting more environmentally sustainable development choices for the benefit of future generations will be a difficult political challenge for both developed and developing societies.

How do we measure progress in human welfare over the longer term?

Over the longer term, if progressive policy makers are to put sustainable development and social justice at the heart of their decision-making, then radical questions may need to be asked about how we measure progress in human welfare. Environmental philosophy has traditionally taken a rather 'doom and gloom' outlook of society, often extremely viewing human nature as greedy and self-satisfying with little respect for the natural environment. Thomas Malthus famously argued that the Earth's resources are fixed and that population growth should be governed by that physical constraint. Malthus formed his ideas in the 18th Century and since then the world has changed considerably and there have been many technological advances. However, Meadows and his colleagues – often referred to as the 'Club of Rome' advocates – also later echoed Malthus' pessimism and concerns about human development in their classic 1972 text *The Limits to Growth*. They argued that problems of resource scarcity and pollution would pose a threat to continued trends in modernisation. Other environmental philosophers, such as James Lovelock, founder of the Gaia principles, have similarly highlighted the problems associated with modern society's ethos of expansion and prosperity.

In recent years we have seen the emergence of what could be described as 'pragmatic environmentalism.' Many environmental campaign groups and charities are increasingly using a different kind of argument to express their concerns about the environmental effects of consumption. They have focused, not only on what consumers will lose as a result of environmental policies, but on what they will gain. In other words, a sustainable development approach can reduce polluting emissions and traffic congestion, protect the countryside and wildlife

habitats, promote social inclusion and so on (Jacobs 1997).

When the Chancellor of the Exchequer gives his Budget speech, he reports on progress in terms of economic indicators such as Gross Domestic Product (GDP) and employment. He does not highlight the performance of the Government's quality of life indicators. GDP per head is an important measure of material output in the economy. Employment rates are an important component of GDP per head but also are central to measures of household and individual welfare. However, recent debates over quality of life and the 'happiness' literature suggests that we are too reliant on narrow economic indicators for measuring progress in human welfare.

It is not only private consumption which makes people well off, but also a range of other goods which people enjoy but do not personally buy. Environmental goods, such as clean air, low traffic levels and a protected countryside, fall into this category. If, to pay for such goods, prices and taxes must rise and private consumption must therefore be somewhat reduced, this does not automatically mean that people are worse off (Jacobs 1997). If we are to develop an understanding of sustainable development as an important arm of social justice, then as a society we may need to radically reconceptualise how we measure human development and quality of life. This does not mean denying the importance of consumption to wellbeing but acknowledging that there are other, environmental, goods that can also enhance people's quality of life. The ultimate challenge for progressive policy makers will be to find ways of balancing the desire for economic growth with the need to protect the environment and enhance quality of life.

References

- DEFRA (2002) *A New Strategy for Sustainable Farming and Food* Department for Environment, Food and Rural Affairs
- Dobson A (1998) *Justice and the Environment. Conceptions of Environmental Sustainability and Dimensions of Social Justice* Oxford University Press
- DoH (2003) *Tackling Health Inequalities* Department of Health
- Grayling T, Hallam K, Graham D, Anderson R, Glaister S (2002) *Streets Ahead: Safe and liveable streets for children* ippr
- ippr (1994) *Social Justice: Strategies for national renewal* The report of the

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Commission on Social Justice, ippr

Jacobs M (1997) 'The Quality of Life: Social goods and the politics of consumption' in *The Political Quarterly* Blackwell Publishers

Meadows D *et al* (1972) *The Limits to Growth* Earthscan

Miller D (1999) 'Social Justice and Environment Goods' in Dobson A (ed) *Fairness and Futurity* Oxford University Press

Rawls J (1973) *A Theory of Justice* Oxford University Press

Walker G, Fairburn J, Smith G and Mitchell G (2003) *Environmental Quality and Social Deprivation* R&D Technical Report, Environment Agency

Wanless D (2004) *Securing Good Health for the Whole Population* Report by Derek Wanless for HM Treasury

WCED (1987) *Our Common Future* The Brundtland Report for the World Commission on Environment and Development

2. Sustainable communities: regeneration and a just society

Graham Duxbury

In his persuasive critique of social democracy's environmental failings, Jeremy Seabrook (1990) draws fascinating parallels between the daily routines of residents of the Easterhouse estate in Glasgow and those living in Dindoshi on the edge of Mumbai. Interviewees speak of long and difficult journeys to work in low-paid service jobs such as catering or cleaning, extended shifts in manufacturing 'sweat shops' or sporadic periods of self-employment. The picture painted is one of bleak frustration with people scratching a living on the informal economic margins of cities at once on their doorstep yet a world away.

The relative levels of poverty in Easterhouse and Dindoshi are clearly very different. According to Seabrook, however, what unites the two places is that 'both communities bear the same stigma of those who must live off the fag-end of market economies' (Seabrook 1990).

Improving the prospects of those left behind by the market is itself increasingly big business in the UK. In the face of the seismic shifts in a global economy, however, local regeneration initiatives can often seem futile. After all, many areas of the country have been on the receiving end of serial initiatives aimed at pulling them up by their bootstraps. It seems we can paint over the cracks but sooner or later they reappear. In other areas creating new prosperity simply transfers the problem as existing residents are priced out of local markets and the focus of poverty shifts like air bubbles in wallpaper. The whole effort to revive the fortunes of our poorest communities could be described as a poultice, ameliorating the immediate symptoms without ever really finding a cure.

This sense of futility and temporariness is heightened when we consider that the phrase 'sustainable regeneration' is now being adopted to mean regeneration projects that have at least five years of funding attached to them. Long-term resource investment is of course important but delivering sustainable regeneration involves so much more. It is also about ensuring that the initial injection of outside resources leads to the

creation of a 'self-help' infrastructure that allows a community to develop its own responses to hardship.

In other words sustainable regeneration is about lifting communities out of poverty in a way which will allow them to stay out of poverty in the long term. But even that is not enough. It should also be about using this opportunity to remodel our communities, our society and our economy to bring us closer to sustainable development, avoiding the short-term 'jam today' investment decisions that our political system all too often encourages. Of course it is difficult always to apply long-term thinking when the challenges of deprived neighbourhoods are real and immediate. If we are to succeed, however, we must find responses that meet the needs of the present without jeopardising the ability of future generations to meet their needs and to work to a set of principles centred on global citizenship and living within our natural resource means.

There is a clear social justice case for focusing political attention on regenerating deprived communities as a means of tackling poverty. Linked to this is the aspiration for safer and greener communities that foster respect for the local environment, whether or not they are among the most deprived. In policy terms this is the distinction between neighbourhood renewal and the wider sustainable communities plan. For many on the centre left there is a low level of awareness of the links between good quality local environments and other strands of political debate such as street crime, anti-social behaviour and public health. Ultimately, policy issues relating to both sustainable regeneration and sustainable communities more broadly should be important in our understanding of social justice.

How should we regenerate deprived communities and deliver sustainable communities?

We must first recognise and articulate the link between social and economic hardship and environmental poverty and what this means to individual communities. It is self evident that poor people live in the most damaged, unproductive or inhospitable environments. In international development debates this is well understood and the needs of those living on 'environmentally fragile' lands have rightly been prioritised.

In the UK, a similar dynamic is in play with our poorest communities most affected by environmental health issues and the lack of access to environmental 'goods' such as clean air, green space and healthy food. For example the Environment Agency's research found that industrial sites are disproportionately located in deprived areas in England. There are five times as many sites in the wards containing the most deprived 10 per cent of the population, and seven times as many emission sources, than in wards with the least deprived 10 per cent (Walker *et al* 2003).

IPPR's *Streets Ahead* report revealed that children in deprived areas are five times more likely to be killed by cars than those in affluent areas (Grayling *et al* 2002). According to the Department of Health (DoH) the gap in mortality rates between different social groups has increased almost two and a half times since the 1930s with a major factor being where people live (DoH 2003).

These connections between environmental poverty and social exclusion are beginning to be examined and researched through the burgeoning environmental justice movement. Aligned with this understanding is the concept of 'liveability'. As with the 'Clinton-Gore Liveability Agenda', from which the terminology derives, there is a growing recognition across government that communities which look down-at-heel and uncared for are more likely to attract environmental crime and low-level disorder which in turn can jeopardise economic success.

This has been coupled with increasing amounts of research to demonstrate that 'street-level' concerns such as lack of play facilities and 'crime and grime' most affect people's quality of life (ESRC 2001). One survey revealed that when asked what most needed improving in their local area, over 40 per cent pinpointed activities for teenagers, well above concerns about health or education (MORI 2001).

These kinds of liveability issues can also play a central role in determining how people relate to local civic and political institutions. Frustration breeds resentment and fuels a sense of hopelessness in the ability of 'the powers that be' to effect change. Of course it will not have escaped the notice of politicians that some 50 per cent of people interviewed in one survey said that the state of their environment has a direct impact on how they vote (Rouse 2003). It seems strange that it has taken so long for policy makers to grasp what local political activists

and those engaged in community consultation work could have told them years ago: that clean, green, safe environments are the key to sustainable communities.

In the last couple of years we have seen a flourish of policy activity on the subject. A Treasury review of public space and an Urban Green Spaces Task Force fed into the cross-cutting *Living Places* report (ODPM Select Committee 2002). This in turn underpinned the Sustainable Communities programme launched by the Deputy Prime Minister in February 2003 (ODPM 2003). The Anti-Social Behaviour Action Plan also demonstrates a growing recognition that the environment matters and matters most to those who have the least (Home Office 2003).

It may have taken a long time to get there but the fact that 'renewing the public realm' appears to be as important a policy pledge as improving the health service or delivering education is to be welcomed and applauded. The Sustainable Communities plan allocates over £200 million to supporting specific liveability initiatives. This amounts to less than one per cent of the total spending outlined in the plan (ODPM 2003). It is, however, important to recognise that sustainable regeneration will not be achieved by initiatives alone.

Will the Sustainable Communities plan work?

The Sustainable Communities plan recognises that the quality of the homes we live in is inextricably linked to the quality of the neighbourhoods in which they stand. Moreover, it acknowledges that remediating environmental degradation is important to regenerating existing communities just as building in environmental quality is important to creating new ones.

The plan attempts to chart a difficult course by accepting the need to accommodate growing numbers of people in the south and east while at the same time intervening in the market to try and kick-start renewal in the north and midlands. The stakes are high. In particular it will be vital to avoid the mistakes of the past and the creation of soulless suburban developments. Planners must also ensure that new communities are genuinely mixed use and mixed income, and do not simply attract the better-off leaving neighbouring areas to slip into decline.

The commitment to 200,000 new homes in the Thames Gateway, Ashford, Milton Keynes and around the M11 corridor will inevitably result in some greenfield development. Many have also voiced concerns about whether the provision of public infrastructure and services – such as transport, water supply, schools and hospitals – can keep pace with the speed of new development.

The environmental consequences of the plan are immense and significant emphasis has therefore been attached to answering some of the most obvious criticisms. Efforts to recycle or reclaim brownfield land are being redoubled to mitigate the loss of green belt. More new housing will have to meet minimum environmental standards. The Beddington Zero Energy Development (BEDZED), supported by the Peabody Trust, demonstrates how new housing can be designed in a way that is both energy efficient and affordable. A new public space offshoot of the Commission for Architecture and Built Environment (CABE) will aim to drive up design standards, while a ‘liveability fund’ for local authorities will road-test innovation in the maintenance of parks and open spaces over the next three years.

The plan has the potential to mark a major step forward in our ability to deliver improved living conditions for significant parts of the country and many of the commonly accepted ingredients for delivering sustainability are acknowledged. There is an emphasis on community-driven solutions, on reversing and managing environmental degradation, on valuing green space and biodiversity and on moving towards more environmentally responsible construction techniques. Where the real challenge lies, however, is in connecting these elements of the plan with the mainstream thrust of political thinking and ensuring that both social *and* environmental equity lie at the heart of government spending commitments.

Sustainability at the centre

It could be argued that there are two overarching themes to the Government’s social programme. The first is to address hardship and deliver the Prime Minister’s ambitious pledge of eradicating child poverty ‘within a generation’. The second is to revitalise citizenship and address the growing disconnection between individuals and civic and political institutions.

A sustainable community is one in which poverty and inequality have been reduced, in which citizens are active and engaged and where individual choice is balanced with communal rights to a high standard of living and a high quality of life. In global development debates sustainable development has been accepted as the only effective route out of poverty. It could be argued that actions have yet to match up to rhetoric but nevertheless this is an important step forward. It surely follows, then, that sustainable development should also be at the root of the Government's domestic policies centred on tackling hardship and stimulating enterprise. The natural starting point for delivery is the regeneration of deprived communities. There are three key policy areas in which this could be expressed.

Fostering respect for the local environment

It has now become a guiding principle of regeneration practice that improving the physical fabric of run-down neighbourhoods will be pointless unless it goes hand in hand with the development of social ties within a specific locality. In an increasingly fragmented society this requires us to rethink notions of citizenship and neighbourliness and build a new capacity for communal activity and shared responsibility. Practical environmental action to address liveability concerns can be the first step in this process. A study of Groundwork's contribution to neighbourhood renewal concluded:

using environmental improvements as a kind of Trojan horse ...brings significant advantages: improvements are visible and tangible; it is relatively easy to engage communities in consultation about the environment; there are often opportunities to secure 'quick wins' which are important in persuading disillusioned residents that change is possible. (JRF 2002)

The key to long-term success, however, is in sustaining this community involvement and developing the often informal neighbourhood structures that lead to stronger and more settled communities. 'New localism' envisages networks of volunteers engaged in everything from housing management to local police boards and supporting the

development of key individuals as local motivators and role models of active citizenship is important. At the same time, however, we need to build a much broader base of social capital by facilitating more extensive and inclusive neighbourhood action. One way of achieving this is to concentrate on local environmental activity, such as neighbourhood recycling schemes or the improvement of green spaces, which would allow more people to have more of a say in the fabric of their neighbourhood while simultaneously fostering respect for the local and global environment.

Developing the connections between people and place is also important to meeting key political priorities such as the reduction in low-level disorder or anti-social behaviour. This is particularly the case for young people from disadvantaged areas where lack of appropriate local facilities, play spaces and parks can lead them to seek danger and excitement through less social means. In the village of Denby in Derbyshire, Groundwork Erewash Valley and the parish council helped a group of young people design and build a skate park in the wake of accidents caused by children racing the roads on BMX bikes. The project has been praised by Derbyshire Constabulary for the contribution it has made to building understanding between young people and local police.

Delivering such new facilities is one thing. Making sure people feel safe to use them and managing them for public benefit in the long term is quite another. Shrinking maintenance budgets have meant that the public realm has gradually been depopulated of gardeners, park keepers, station attendants and bus conductors, adding to the sense that it is unsafe and belongs to no one. If we are serious about reinvigorating the public realm and sustaining the environmental improvements that should start to be delivered through the Sustainable Communities plan then we need to think again about models of land ownership and how we support and resource vital civic caretaking roles.

Creating enterprising communities

The Neighbourhood Renewal Strategy rightly emphasised the centrality of enterprise to reversing decline and Regional Development Agencies (RDAs) have been charged with strengthening the country's economic base as a platform on which other regeneration strategies can build.

Here, too, there is a strong case for changing the way we invest so that we deliver economic and social objectives that contribute to sustainable development goals.

It has already been recognised that social enterprises offer an excellent vehicle for building social capital in deprived areas and providing a platform for local regeneration. This is particularly true where such enterprises are linked to employment training. They can provide skills, confidence and qualifications for those who have failed to benefit from Welfare-to-Work schemes or who currently reap more immediate benefits from informal and anti-social economies. Prioritising business support for enterprises that deliver environmental 'goods' such as recycling activities, energy efficiency schemes, insulation services, greenspace management or local food production can deliver multiple dividends. Those involved develop greater self-esteem but also pride in their locality whilst the local economy benefits from a wider pool of available skills. EnProve is a social enterprise developed by Groundwork Ashfield & Mansfield through which more than one thousand homes have benefited from insulation and maintenance work undertaken by local unemployed people.

Linking regeneration and public health objectives

This Government has pinned its colours to the mast of reforming and improving the delivery of core public services, especially within the National Health Service (NHS). What is clear at the moment, however, is that the debate on the nation's health continues to be dominated by the need to fund an ever-increasing number of front-line services; in environmental terms an 'end of pipe' solution.

A sustainable community is, by definition, a healthier community. Yet a glance at the news headlines is all it takes to realise that we are in fact travelling in the opposite direction. Asthma and respiratory problems are on the increase and obesity now affects 8.5 per cent of six year olds and 15 per cent of fifteen year olds, perhaps not surprising when only one third of UK children walk to school. According to the Health Development Agency, in 1998 over 18 million days of sickness were attributed to obesity, and the total estimated cost of obesity was £2.6 billion for England. If the prevalence of obesity continues to rise at the present rate until 2010, this annual cost would increase by about £1 billion to £3.6 billion (HDA 2003).

In deprived communities, of course, the problems are exacerbated due to lack of access to healthy food, nutritional information and facilities for recreation and exercise. Yet, while this time bomb ticks away, we continue to focus on providing ever more hospital beds and cardiac facilities instead of investing heavily in combating the environmental causes underlying ill health (Marples *et al* 2003). This means better coordination between local regeneration partnerships and Primary Care Trusts. It means prioritising sustainable transport and ensuring more safe routes to school. The public health report for HM Treasury by Derek Wanless, also reiterated the importance of better integrating public health objectives throughout Whitehall departments (Wanless 2004).

Education also has a vital role to play. In its strategy paper on sustainable development the Foreign and Commonwealth Office (FCO) recommends that developing countries should integrate the environment and its role in human development across the educational curriculum (FCO 2002). This is a fine aspiration but a long way from the position in the UK where we are only now making the first tentative steps towards a comprehensive strategy for education for sustainable development.

Where do we go from here?

Regenerating deprived communities may always be akin to applying a poultice, but the best poultices work by drawing out the toxins from the system to allow the body to recover its own strength. In the same way we need to move beyond simply patching up marginalised neighbourhoods to rebuilding communities in a way which sets our whole society on a path toward a more sustainable future.

The Government must continue to nurture and capitalise on the links between tackling hardship and delivering sustainable communities:

- fostering respect for the people and places around us can build social capital, stem anti-social behaviour and reduce crime;
- environmental enterprises can provide a vehicle for delivering learning and skills;
- looking after and making better use of the local environment can improve public health.

We will only profit fully from these connections if we embrace sustainable development as a core principle underlying policy-making and public spending. It is time sustainability came to be seen less as a scientific necessity by the few and more as a moral imperative for the many, central to delivering social justice and at the heart of a truly progressive manifesto.

References

- Acheson D, Barker D, Chambers J, Graham H, Marmot M and Whitehead M (1998) *The Acheson Report: Independent inquiry into inequalities in health* The Stationery Office
- Adams J, Robinson P and Vigor A (2003) *A New Regional Policy for the UK* ippr
- ESRC (2001) *Environmental Justice. Rights and Means to a Healthy Environment for All* Special Briefing 7 Economic and Social Research Council Global Environmental Change Programme
- Grayling T, Hallam K, Graham D, Anderson R, Glaister S (2002) *Streets Ahead: Safe and liveable streets for children* ippr
- DoH (2003) *Tackling Health Inequalities* Department of Health
- FCO (2002) *Sustainable Development Strategy* Foreign and Commonwealth Office
- HDA (2003) *The Management of Obesity and Overweigh* Health Development Agency
- Home Office (2003) *Anti-Social Behaviour Action Plan* Home Office
- JRF (2003) *The Groundwork Movement: Its role in neighbourhood renewal* Joseph Rowntree Foundation
- Marples C, Lang T, MacArthur I, Roberts I, Coote A, Strutt M, Ashton J, Harrison D, Hobbs A and Jochelson K (2003) *A Green Bill of Health: A new agenda for health and environment policy* Green Alliance
- Seabrook J (1990) *The Myth of the Market* Green Books
- MORI (2001) *Audit Commission Quality of Life Indicators Project* MORI Social Research Institute
- Rouse J (2003) 'Get into the Swing of Park Life' in *The Observer* 6.4.03
- ODPM (2003) *Sustainable Communities: Building for the future* Office of the Deputy Prime Minister

ODPM Select Committee (2002) *Living Places: Cleaner, safer and greener*
Report from the House of Commons Select Committee for the Office
of the Deputy Prime Minister

Walker G, Fairburn J, Smith G and Mitchell G (2003) *Environmental
Quality and Social Deprivation* R&D Technical Report, Environment
Agency

Wanless D (2004) *Securing Good Health for the Whole Population* Report
by Derek Wanless for HM Treasury

3. Social justice in an upwardly mobile society

Tony Grayling

Mobility is rarely an end in itself but a means of access to goods and services, family and friends, social and cultural life. The objective of progressive transport policy should be improving access in a way that enhances the quality of life for all and ensures good environmental stewardship. Judged against these criteria, the Government's Ten Year Plan for Transport (DETR 2000) is good in parts but is biased to the rich and tends towards promoting mobility rather than accessibility as an inherent good. There is, however, opportunity to change the direction of transport policy as the Ten Year Plan for Transport will be revised in 2004, as part of the Government's biennial spending review, and rolled forward to 2015.

An upwardly mobile society

The challenge for progressive transport policy is how to reconcile freedom of choice with the common good. Left to their own devices, the transport choices of individuals and organisations do not add up to a common good and may ultimately be self-defeating. Britain is an upwardly mobile society. It is not that people are making more journeys or spending more time on the move. The number of journeys made and the time spent travelling has not changed significantly for at least 30 years (Metz 2003).

What has changed is that people are making longer journeys by faster means. The long-term trend is away from the slow, local modes like walking, cycling and taking the bus, towards faster, longer distance transport, mainly by car. In the last 30 years, the average trip length has increased by almost half from 4.7 miles in 1972-3 to 6.9 miles in 2002 (National Statistics and DfT 2003). People are travelling further to work, education, leisure, shopping, healthcare and other services. These trends have been reinforced by land use planning policy that has favoured out of town retail and business centres and low-density greenfield housing developments.

Barbara Castle's 1966 Transport White Paper recognised that:

The rapid development and mass production of the motor vehicle over the past 20 years has brought immense benefits to millions of people: increased mobility, a fuller social life, family enjoyment, new experiences. It has also produced a new, quick and convenient means of moving goods. (Ministry of Transport 1966)

But it also acknowledged that these benefits come at a price to society and the environment:

at the same time it has brought severe discomforts: congestion in the streets of our towns; the misery of the journey to work for commuters; noise, fumes and danger as the setting of our lives; a rising trend of casualties on our roads and a threat to our environment in both town and countryside which, if it continues unchecked, will ensure that the pleasure and benefit for which we use the car will increasingly elude us. (Ministry of Transport 1966)

The progressive dilemma in transport policy remains the same: how to resolve this paradox.

Some of the problems can be tackled by technology. Advancements in pollution abatement technologies and cleaner fuels, driven by European regulations, have led to significant reductions in the exhaust emissions of air pollutants from new cars. Mitigating the local effects of air pollution from road transport, especially in urban areas, remains a concern and there are still many unanswered questions regarding the health implications of air pollutants and their link to respiratory problems. From a social justice perspective, people in deprived wards tend to be exposed to much higher concentrations of local air pollutants even though they tend to live in areas of low car ownership (Mitchell and Dorling 2003).

There is, however, little doubt that the greatest challenge facing governments and industry will be to reduce the contribution that road vehicles make to climate change. Road transport is responsible for nearly a quarter of the UK's carbon dioxide emissions. To date, the carbon dioxide emissions from increases in road traffic have been largely

offset by improvements in vehicle efficiency. But, in future, fuel efficiency improvements are unlikely to keep pace with traffic growth. Rising road transport emissions could, if not addressed, endanger the prospects of meeting the Government's 2010 target to cut carbon dioxide emissions by 20 per cent, from 1990 levels, and by 60 per cent in the long term (Foley and Fergusson 2003).

Hydrogen holds out the potential to replace fossil fuels, especially in transport, and could transform our energy system offering a vision of a transport system that is completely clean with no exhaust emissions. But mass produced hydrogen powered cars are still some way off and there are many technical challenges ahead. Constraints on renewable energy supplies means that if there were a significant shift to hydrogen as a road fuel within the next few decades, then the hydrogen would be largely produced from fossil fuels. Whilst this would significantly reduce carbon dioxide emissions, it would not eliminate them instead moving them upstream to where the hydrogen is produced (Foley 2001).

Other problems are less obviously susceptible to technological solutions, notably social exclusion for the significant minority of people who do not have a car, as local public transport declines and the distance to shops, services and employment increases. Many right-wing politicians would be attracted to the option of extending car ownership to the poorest households, consistent with the aspirations of the overwhelming majority of people to own a car. Leaving aside the young and the old who cannot drive, such a simplistic solution misses the point.

Extending the opportunity to own a car may be a social good but reinforcing the necessity of using a car is surely not. That would further erode the quality of life by road traffic in both urban and rural areas and increase global pollution. Instead, what is required is a policy framework that extends transport choice while reducing the need to use a car. The most egalitarian and environmentally friendly forms of transport – namely walking, cycling and local public transport – are also those that tend to contribute most to social cohesion.

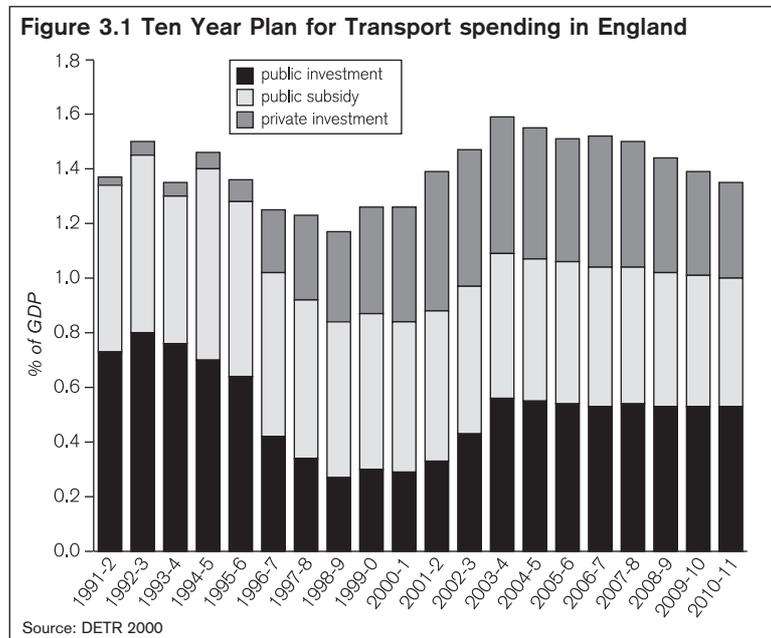
The Ten Year Plan for Transport

Launched with a fanfare in July 2000, the Government's Ten Year Plan for Transport (in England) boasted £180 billion of public and private spending over ten years from 2001 to 2011 to modernise the transport

system (DETR 2000). Its key targets were to cut road traffic congestion and increase train passenger miles by 50 per cent and rail freight by 80 per cent by 2010. It also included 2010 targets to increase bus journeys by ten per cent, improve access to rural bus services, double light rail use, reduce road deaths and injuries by 40 per cent and to cut carbon dioxide emissions. Good progress has been made on the second set of targets, with the exception of carbon dioxide emissions, but the key targets on congestion and railways have been dropped.

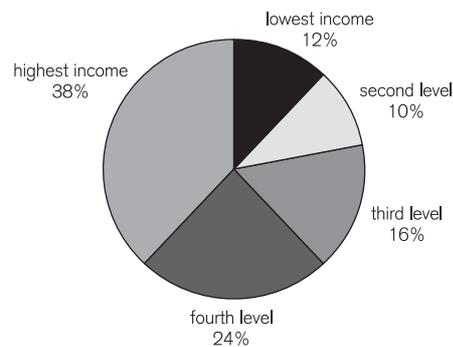
Transport policy was knocked off course in autumn 2000 by the fuel tax protests and the Hatfield train crash. The Government admits that traffic could increase by between 20-25 per cent by the end of this decade, from 2000 levels (DfT 2003a). This is a faster rate of growth than that experienced over the 1990s. Its plans to improve the railways have been cut back because the network is costing far more to operate and maintain, though services are less reliable than before Hatfield.

Though good in parts, the Ten Year Plan for Transport is modest in scale, regressive in impact and lacks an effective demand management strategy. Figure 3.1 shows that, as a proportion of the national income, the plan promises no more than to return spending on transport to the level of the early 1990s.



According to the Government's own analysis, most of the benefits of the public spending in the Ten Year Plan for Transport would go to people on higher incomes (SEU 2003). Figure 3.2 illustrates that the richest fifth of households are estimated to gain more than three times the benefits of the poorest fifth. This is because people on high incomes make more journeys by car and train than those on low incomes who make more journeys on foot and by bus. There is far more spending planned on roads and railways than on pavements and buses.

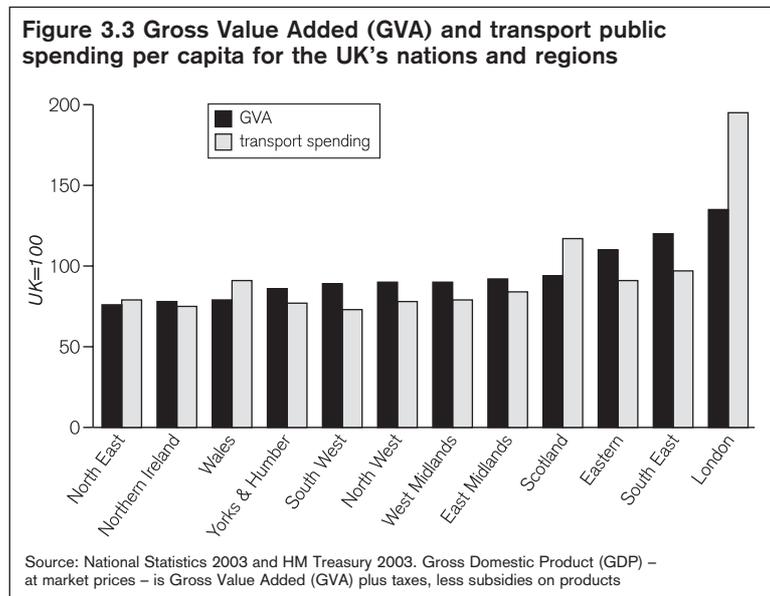
Figure 3.2 Gain from public spending in the Ten Year Plan for Transport by household income



Source: SEU 2003

Spending is also biased to the more prosperous regions. Figure 3.3 shows the richer the region, the higher per capita public spending on transport, with spending in London double the national average in the first year of the plan. Only Wales and Scotland, which benefit from devolved funding and have their own transport plans, significantly buck this trend.

This distribution of spending might be warranted by the economic benefits. Rawls' theory of social justice as a social contract suggests that inequalities may be justified provided that they benefit the poorest in society, through increasing the overall level of prosperity (Rawls 1973). However, there is no simple link between transport provision and economic prosperity. An authoritative report by Britain's foremost transport economists concluded that in a mature economy with a well-



developed transport system, like Britain, the impact on overall economic growth of further enhancements is likely to be small (SACTRA 1999).

Managing demand

A fundamental error of the Ten Year Plan for Transport is the near exclusive focus on the supply of transport. Most of its targets are about accommodating or promoting an increase in mobility, with the exception of access to rural bus services. What is needed is a new approach to transport policy that puts accessibility centre stage, with the aim of shorter journeys to meet people's daily needs. This means action to reduce the demand for transport as well as improving supply. Some of the key policy instruments on the demand side are planning, pricing and persuasion.

Land use and spatial planning should be used to promote compact urban developments that mix housing, shops, services and employment together, so that people can meet their needs closer to home. The Urban Task Force, established by the Deputy Prime Minister, John Prescott, recognised that high density, mixed urban neighbourhoods can also be the most successful communities (Urban Task Force 1999). The

Government's Sustainable Communities plan edges in the right direction but the minimum densities it proposes are not high enough to make a real difference (ODPM 2003). The concern, however, is that major new housing developments in the South East growth areas may generate additional traffic, worsening journey times as well as local air quality, adversely affecting public health.

The success of the central London congestion charge, introduced in February 2003, has changed the terms of the debate on road user charging. Confounding the critics, traffic levels are down by 16 per cent and congestion has been cut by 30 per cent (TfL 2003). The scheme has been criticised for pricing the poor off the roads. But it is in fact broadly progressive as the charge mainly falls on businesses and people on higher incomes who benefit from less congestion. Most Londoners on low incomes do not own a car but get about by foot and public transport. In fact, more than eight out of ten people who travel into central London do so by public transport (TfL 2003). Some of the surplus money raised has been used to put on extra bus services, which are flowing better due to less congestion.

If central London is a special case, then the general rules apply. The richer the household, the more likely it is to own one or more cars and the more miles it is likely to go by car. Thus road user charging is broadly progressive, which is reinforced if the money raised is earmarked for local transport improvements, although it matters how it is designed and there are exceptions. Low income households in rural areas poorly served by public transport spend up to a quarter of their disposable income running a car and would find it hard to manage without one (DfT 2003). There are ways to address this problem. If the charges were varied according to the level of congestion, then they would be much lower on rural roads that have less traffic than congested urban areas and motorways. As part of a national scheme, some of the money raised could be used to pay for the abolition of road tax, a fixed cost that falls heavily on low-income motorists (Foley and Fergusson 2003).

Between 2006 and 2008, the Government plans to introduce a distance-based charge for heavy goods vehicles on Britain's roads (HMT *et al* 2004). It is likely that there will be offsetting cuts in diesel duty for heavy good vehicles, dulling the incentive for fuel efficiency. Taxes paid on heavy goods vehicles do not cover their congestion, pollution and

road maintenance costs, and were wrongly cut as a result of the fuel depot blockades in autumn 2000. If the distance based charge were levied on top of fuel duty it would help to make rail freight relatively more competitive as well as reducing lorry traffic and fuel consumption. The vested interests of the road haulage industry, and baseless assertions about competition from overseas, should not be allowed to dictate policy.

The Government is currently conducting a feasibility study on how a national congestion charging scheme for cars could be introduced. A national, comprehensive congestion charging scheme is unlikely to be something any government could implement before the end of this decade. With more than 25 million cars on the road, compared with fewer than 500,000 heavy goods vehicles, the scale of the technical challenge is immense. Many European countries favour the use of Global Positioning Satellite (GPS) tracking technology which can pinpoint a vehicle's location on any road at any time of the day. But GPS technology has only been tried and tested in a few countries to date and there have also been concerns that using such technology could be an infringement of peoples' civil liberties.

Though welcome, the feasibility study should not be used to postpone action. In the coming years, however, there is nothing to stop local authorities pressing ahead with area based charging schemes modelled on the London congestion charge. The Government should follow the precedent of the M6 toll road in Birmingham, opened in December 2003, by introducing tolls on the most congested sections of Britain's motorway network.

Increasing the pay-as-you-drive costs of motoring makes good sense but the relative cost of public transport also matters. Affordable fares have long been undervalued as an instrument of transport policy. Whereas the overall cost of motoring has not increased in real terms, average rail fares have increased by 35 per cent and bus fares by more than 40 per cent since 1980, which has encouraged the switch to cars (National Statistics and DfT 2003). The introduction of a statutory minimum half bus fare concession for pensioners and people with disabilities in England is therefore welcome and mainly benefits people at the lower end of the income scale. Wales and Scotland have gone further by introducing free bus travel for pensioners and the disabled. Standard bus fares, however, continue to rise year on year except in

London where the Mayor, Ken Livingstone, froze fares between 2000 and 2003, though they are now on the rise again owing to funding constraints.

In spite of Hatfield and poor reliability, there are more people travelling by train than at any time since the Second World War. But especially in the South East, regular train travel is done mainly by people on relatively high incomes. With the railways costing far more simply to operate and maintain since Hatfield, it cannot be a priority to subsidise fares on over crowded routes. There is a stronger social case for subsidising off-peak regional and local fares and the long-term aspiration should be to make train travel more affordable for all.

Hard policy measures like pricing are highly effective in changing people's behaviour but soft measures can also be effective in persuading people to use their cars less. Mass marketing campaigns like 'Are you doing your bit?' help to raise the general level of awareness about environmental issues but do little to change behaviour. Targeted initiatives are more effective. A good example is 'TravelSmart', trialled on a large scale in the city of South Perth in Australia. Through simple means, like personalised bus timetables and trial tickets, and local walking and cycling route maps, the community gave up one in seven car journeys on a sustained basis, with corresponding increases in walking, cycling and public transport use. The scheme proved so cost effective that it is now being rolled out across the Perth metropolitan area (Government of Western Australia 1999).

In the UK, pilot schemes in Gloucester and Frome have produced similar results and a number of larger scale government funded trials are now underway. Targeting particular destinations like the school or workplace can also be effective. The increase in funding to school travel plans and green commuter plans is therefore also welcome.

Improving supply

Key policy instruments on the supply side are public spending and regulation. There is a strong case both for an increase in the overall amount of spending on transport and for redistribution towards people on low incomes and poorer areas, so that the benefits of public spending on transport are spread more equitably. More prosperous regions should raise money for their own transport improvements, while

less prosperous regions should get at least an equal per capita share of national public spending on transport. Socialism appears to stop at the M25 for those who argue that London should get an even greater share than it already does.

With the Government's socially progressive commitments to increase public spending on health, education and tackling child poverty, it is clear that transport will not be first in the queue for extra money from general taxation. This strengthens the case for new sources of funding for transport such as road tolls and congestion charges and development taxes, to capture a proportion of the windfall gains in private property values resulting from new transport infrastructure, to help pay for it. Road user charges are likely to be more acceptable to motorists if the money raised is ear marked for transport improvements. Research commissioned by ippr suggests that a national congestion charging scheme introduced in England in 2010, could raise – in 2010 prices – around £16 billion per year (Foley and Fergusson 2003). This compares with total current public spending on transport of about £13 billion in 2002-3.

The Government deserves credit for substantial increases in spending on local transport in England, from less than one billion pounds in 1998-9 to more than £2 billion pounds in 2003-4, with plans for further increases (DfT 2003b). But getting good value for money out of spending on public transport also requires the right regulation. The 1985 Transport Act deregulated bus services across Great Britain except in London. Bus use has fallen by 35 per cent between 1985-6 and 2002-3, whereas in London the number of bus journeys has increased by a total of 34 per cent over the same period (DfT 2003b). There has only been progress towards the Ten Year Plan for Transport target of a ten per cent increase in bus journeys in England because the growth in London outweighs the decline elsewhere. In London, this is not all down to Ken Livingstone's bus fares freeze as bus usage in London was growing before he was elected. The fact that private bus operators continue to be publicly regulated in relation to routes, timetables and fares also explains why bus patronage has increased year on year.

The Transport Act 2000 contains powers for network regulation of bus services by local authorities outside London through 'quality contracts'. But this requires permission in England from the Secretary of

State for Transport or in Wales from the Welsh Assembly which have so far preferred to promote 'quality partnerships'. Quality partnerships give no purchase over routes, timetables and fares and only enable local authorities to require higher vehicle standards, such as low-floor and low-emission buses, on routes where the local authority makes improvements like bus lanes or shelters. Their success has been limited to particular routes and one or two areas like Brighton. The Government and Welsh Assembly should support a number of local authorities to try quality contracts. Scotland, with its own more permissive transport legislation, may get there first.

Improving transport is not just about bus service improvements or major road and rail schemes but small-scale investments that improve the environment for pedestrians and cyclists, which are often far more cost effective. The Government is a late convert to developing a strategy for improving conditions for walking and increasing the number of journeys made on foot (DfT 2003c). The heart of this strategy should be making streets safer and more liveable for children, cyclists and pedestrians by reducing the amount and speed of traffic and through better design.

Britain has a low rate of road deaths and serious injuries overall but a relatively poor record on child pedestrian safety compared with other European countries. The engineering approach that achieves safety by giving priority to traffic flow and keeping people off the road, sometimes herded behind barriers or into squalid underground tunnels, has reached its limit in Britain. Instead, the approach should be to slow down traffic to 20 miles per hour or less in residential areas and to design streets to give priority to children, pedestrians and cyclists. If targeted in deprived areas, then such measures could help to achieve the Government's target to reduce the number of children killed or seriously injured on Britain's roads by half by 2010. Traffic calming measures could help to tackle social inequality as there is a strong correlation between child pedestrian accident rates and deprivation (Grayling *et al* 2002).

Recent research by the London Road Safety Unit suggests that a programme of traffic calming covering 60 per cent of London borough roads would cost about £200 million and pay for itself in less than a year through casualty reductions (Hines 2003). In the longer term, the aim should be to redesign residential streets and the public realm to integrate rather than segregate people and traffic. This approach has been pioneered in the Netherlands and other northern European

countries (Hamilton-Baillie 2003). The adoption of Home Zones in the UK is a step in this direction but improving street and neighbourhood design requires major public investment.

Integrated transport

Soon after the Labour Government won the 1997 general election, John Prescott declared:

I will have failed, if in five years time there are not many more people using public transport and far fewer journeys by car. It's a tall order but I urge you to hold me to it. (Prescott 1997)

Somewhere along the way, the Government has lost sight of its vision for an integrated transport policy. The 1998 Transport White Paper called for transport policy to be integrated within and between different types of transport, integrated with the environment, land use planning and other policies for health, education and wealth creation (DETR 1998). The Department for the Environment, Transport and the Regions (DETR), created as one of the Government's first acts in 1997, was designed to deliver this vision. But the Government has retreated, the DETR has been disintegrated and the old transport department recreated. It is a depressing saga but the worst may be over.

The review of the Ten Year Plan for Transport presents an opportunity for a radical overhaul in policy and spending priorities and the way transport services are delivered. At national level, transport and land use planning should again be brought together in one department. The Strategic Rail Authority should be merged with the Office of the Rail Regulator and the railway safety functions of the Health and Safety Executive to create a single strategic regulator for the railways responsible for the network, services and safety (Grayling 2002).

At regional level, the Government should follow the logic of its own devolution agenda by making regional assemblies integrated planning and transport authorities. Livingstone's success in implementing congestion charging and improving bus services in London has been enabled by a co-ordinated approach that is not possible in any other English region, where transport responsibilities are highly fragmented. Britain stands out in comparison to other European countries in not

having regional transport authorities (CfIT 2002). At local level, 'accessibility planning' whereby spatial planning and transport provision are co-ordinated to connect people to jobs and services requires an integrated approach (SEU 2003).

Social justice and sustainable mobility are entirely compatible, aligning individual choice with the common good. Both social equity and environmental sustainability point in the direction of enabling people to meet their needs through shorter journeys by environmentally friendly means. The objective should not be promoting mobility for its own sake but accessibility, liveability and sustainability. That is the progressive way forward.

References

- Adams J, Robinson P and Vigor A (2003) *A New Regional Policy for the UK* ippr
- CfIT (2002) *Organisation, Planning and the Delivery of Transport at the Regional Level* Commission for Integrated Transport
- DETR (2000) *Transport 2010 – The Ten Year Plan* Department of the Environment, Transport and the Regions
- DETR (1998) *A New Deal for Transport – Better for Everyone* Department of the Environment, Transport and the Regions
- DfT (2003a) *Managing Our Roads* Department for Transport
- DfT (2003b) *Annual Report 2003* Department for Transport
- DfT (2003c) *On the Move By Foot: A discussion paper on encouraging more walking and improving conditions for pedestrians* Department for Transport
- Foley J (2001) *H₂: Driving the future* ippr
- Foley J and Fergusson M (2003) *Putting the Brakes on Climate Change* ippr
- Grayling T (2002) *Getting Back on Track: Reforming the ownership and regulation of Britain's railways* ippr
- Grayling T, Hallam K, Graham D, Anderson R and Glaister S (2002) *Streets Ahead: Safe and liveable streets for children* ippr
- Government of Western Australia Transport (1999) *TravelSmart 2010 – a 10 Year Plan*
- Hamilton-Baillie B (2003) *Urban Design: Why don't we do it in the road* Paper presented to the ippr 'Streets Ahead' Conference, Kingston-upon-Hull, 5.2.03

- Hines C (2002) *20 Mile Per Hour Zones* Presentation to the Pan London Road Safety Forum, London 19.11.03
- HM Treasury (2003) *Public Expenditure Statistical Analysis 2003* HM Stationery Office
- HM Treasury, HMCE and DfT (2004) *Modernising the Taxation of the Haulage Industry – Lorry road user charging progress report 3* HM Treasury, HM Customs and Excise and the Department for Transport
- Metz D (2003) *Time Travel Constraints in Transport Policy* Population Ageing Associates
- Ministry of Transport (1966) *Transport Policy* Cm 3057 HM Stationery Office
- Mitchell G and Dorling D (2003) 'An Environmental Justice Analysis of British Air Quality' in *Environment and Planning* 35
- National Statistics (2003) Regional Gross Value Added (GVA) Statistics from the Office of National Statistics (ONS) available at www.statistics.gov.uk
- National Statistics and Department for Transport (2003) 'National Travel Survey: 2002 Provisional Results' *Transport Statistics Bulletin*
- ODPM (2003) *Sustainable Communities: Building for the future*
- Prescott J (1997) Speech to the Royal Geographical Society, London, 6.6.97
- Rawls J (1973) *A Theory of Justice* Oxford University Press
- SACTRA (1999) *Transport and the Economy* Report to the Department for Environment, Transport and the Regions, Standing Advisory Committee on Trunk Road Assessment
- SEU (2003) *Making the Connections: Transport and social exclusion* Social Exclusion Unit, Cabinet Office
- TfL (2003) *London Congestion Charge: Six months on* Transport for London
- Urban Task Force (1999) *Towards an Urban Renaissance* Final report to the Department for the Environment, Transport and the Regions

4. Strengthening the link between climate change, international development and social justice

Tony Juniper

Recent extreme weather events have dramatically demonstrated the vulnerability of many countries to the impacts of climate change. Driven by global warming, which in turn is caused by the build up of greenhouse gases in the Earth's atmosphere, climate change is expected to be a major factor shaping development in many countries.

The best scientific assessment of climate change, from the Intergovernmental Panel on Climate Change (IPCC), suggests that by the end of this century the Earth's temperature could rise by up to 5.8 °C (IPCC 2001a). According to the IPCC there is no longer any reasonable doubt that human-induced emissions of greenhouse gases, particularly carbon dioxide released in the combustion of fossil fuels, such as coal, oil and gas, are largely to blame. Climate change will trigger more intense, frequent and unpredictable hazards. While reported weather related events have remained fairly constant since the 1970s, their impacts appear to be getting worse. Droughts and extreme temperatures affected 71,000 people during the 1970s and 1980s but over 13 million people in the 1990s. Cyclones affected eighteen times more people and floods and landslides affected nine times more people in the 1990s compared to the 1970s (IFRC 2002).

Climate change is already creating social injustices in both developed and developing nations. In Europe, record temperatures during the summer heat wave of 2003 particularly affected vulnerable groups such as the elderly. Climate change is also expected to exacerbate the risks of coastal flooding in deprived areas across Europe. In England, there are eight times more people in the most deprived ten per cent of the population living in tidal floodplains, than the least deprived ten per cent (Walker *et al* 2003).

The poorest and most vulnerable in developing countries are nearly always the most severely affected by climate change. Hurricane Mitch,

which devastated large areas of Central America in 1998, is a case in point. As a consequence of this single storm over 9,000 (mainly poverty stricken) people lost their lives. In Honduras, 70,000 homes were damaged and half the agricultural crops were destroyed leaving the economy devastated (US NOAA 2000). Extreme rains and mudslides wiped out 5,500 homes, damaged another 25,000 homes and affected between 80-100,000 people the following year in Venezuela (IFRC 2001).

Aside from the destructive impacts of extreme weather related events, poorer countries are also especially vulnerable to the longer term effects of global warming on food security. Agriculture is often described as the 'prevailing way of life' in Africa where it generates one third of the national income. On average, 70 per cent of the population are farmers and 40 per cent of all exports are agricultural products. The poor in sub-Saharan Africa spend 60-80 per cent of their income on food and as a consequence there is a direct reliance on farming for peoples' basic well-being (IPCC 2001b). While inequitable access to food is a major factor in fuelling world hunger, global warming is also undermining food security (Walter and Simms 2002). There is a growing consensus that a rapidly changing climate in Africa could be highly damaging to development and worsen food supply in Africa (IPCC 2001b).

The link between the long-term development prospects of the most vulnerable societies and climate change raises very serious social justice questions that run to the heart of sustainable development choices. It is somewhat surprising therefore that none of the UN's Millennium Development Goals for 2015 mentions the need to reduce the risks of climate change on poorer communities around the world.

Closer to home, the Government has pioneered action to integrate climate change into development policy. Its first White Paper on international development recognised climate change as perhaps the most serious global environmental problem we face. It promised that the full range of Government policies affecting developing countries, including environment, trade, investment and agricultural policies, would take sustainable development into account (DfID 1997). This commitment was strengthened by a further White Paper in which the Government pledged to work with developing countries to ensure that their poverty reduction strategies reflected the need to manage environmental resources sustainably (DfID 2000).

Despite these positive policy statements, in practice the Department for International Development (DfID) has yet to fully appreciate the relationship between global climate change and sustainable development. Part of the problem is that climate change has historically been viewed as one of many environmental issues threatening development. A report from the House of Commons Select Committee for International Development concluded that 'by grouping climate change with environmental degradation or the mismanagement of natural resources, the long term nature of climate risks will be overlooked as DfID's policies react to short term concerns' (DfID Select Committee 2002).

With the implications of climate change for development very much in mind, there are four key areas where the Government could better align social justice and sustainability priorities in its response to climate change:

- Emission reduction targets: the need for a long-term agenda
- Equal rights to the atmosphere: a fair approach to allocating emission entitlements
- Climate protection: helping poor countries adapt to unavoidable climate change
- Changing investment: from fossil fuels to renewable power

Emission reduction targets: the need for a long-term agenda

Climate change poses global challenges that respect no borders in its impacts. Its worst impacts can only be avoided through a global framework of action. With this realisation 154 nations, including the US, signed the United Nations Framework Convention on Climate Change (UNFCCC) at the Earth Summit in Rio de Janeiro in 1992. Five years later, countries agreed the Kyoto Protocol setting targets for industrialised countries to cut their greenhouse gas emissions (by at least five per cent) from 1990 levels by 2012.

However, the US, which is responsible for 24 per cent of global emissions with only four per cent of the population, has refused to ratify Kyoto. George W Bush did not attend the 2002 Earth Summit in Johannesburg in order to underline US opposition to the Kyoto

accord. Meanwhile, US officials have sought to delay action further by announcing another five years of technical investigations aimed at developing scientific forecasts before deciding how best to address the problem. This is despite the consensus already reached in the IPCC. The US approach demands that other industrialised countries take a strong lead in advocating socially just action to combat climate change. Russia, meanwhile, is still prevaricating over whether or not to ratify.

We need to move forward to negotiate a long term solution to climate change based on stabilising concentrations of greenhouse gases at a safe level. The UNFCCC aims to stabilise 'greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' (UN 1992): in other words, to stop dangerous, human-induced climate change. Critically, however, it does not specify what level of climate change is dangerous and specifying this level will be a key task for future talks.

The Climate Action Network (CAN), a grouping of Non-Governmental Organisations (NGOs) from across the world, has taken advice from leading climate scientists and concluded that climate policy should aim to limit the average increase in global temperature to 2°C above pre-industrial levels, and to lower it as quickly as possible thereafter (CAN 2002). This means global concentrations must remain below 450 parts per million (ppm), as compared to about 372 ppm now, and that emissions must peak before 2020 and fall by about 60 per cent from 1990 levels by 2050. The Rt Hon Margaret Beckett MP, Secretary of State for the Environment, Food and Rural Affairs, has already indicated some support for this conclusion:

Given the predicted dire consequences and irreversibility of climate change, we should be guided by the precautionary approach as set out in the UNFCCC. In my view, this means adhering to a course of action that will keep temperature increases to no more than 2°C above pre-industrial levels. I urge others to work together to bring us closer to consensus on this. (Beckett 2003)

Equal rights to the atmosphere: a fair approach to allocating emission entitlements

If the world is to stabilise concentrations of greenhouse gases at a safe level, a 'global emissions budget' consistent with the target concentration will need to be implemented. At some point therefore a 'global deal' on sharing our atmospheric property rights will also have to be agreed. This in turn raises questions about how to allocate this global emissions budget in a manner that is fair and reflects developing country concerns that they have adequate room for their economies to grow.

There are currently huge disparities in the per capita emissions of greenhouse gases between countries with the emissions of many developing nations amounting to only a tiny fraction of those released from most developed countries. The UNFCCC recognises this crucial fact and asserts that countries should protect the climate 'on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities' (UN 1992).

The Kyoto Protocol built on this principle and acknowledged that developed countries should bear more of the historic responsibility for climate change. The richer, industrialised countries agreed targets to cut their greenhouse gas emissions first with no reduction targets allocated to the poorer, developing countries. The UK agreed to reduce emissions by 12.5 per cent from 1990 levels by the years 2008-2012 as part of a European Union burden-sharing agreement (that allows for some EU nations to increase emissions). It has also helpfully committed to going further and to reducing carbon dioxide emissions by 20 per cent by 2010 compared to 1990 levels. Margaret Beckett has recognised that 'whilst the first Kyoto commitment period represents an important first step, it is only the start of a long and difficult journey' (Beckett 2003).

In the longer term, developing countries will also have to accept limits on their emissions. One idea promoted in different forms, including by Friends of the Earth, is that a country's share of global emissions should eventually reflect its share of the world's population. Agreeing emission limits on a 'per capita basis' would, as a guiding principle, ensure that every person is entitled to release into the atmosphere the same quantity of greenhouse gas emissions. Without a long term guarantee of equitable emission entitlements, developing countries are likely to continue to refuse to participate in international

action on climate change which would provide an excuse for further procrastination by the US.

Perhaps the best chance of getting developing countries on board would be to allocate emission entitlements on a per capita basis rather than in proportion to national wealth or even existing emissions. This approach has already received some support from developing countries including India and the African Group of the Non-Aligned Movement.

An immediate per capita allocation of emissions would probably not stand much chance of being implemented as it would mean that industrialised countries would have to cut their emissions by far more, while many developing countries could increase theirs. Because of the very wide differences between per capita emissions levels around the world, there will have to be an adjustment period covering several decades in which nations' quotas converge on the same per capita level (Blundell 2002). This transitional framework is known as 'Contraction and Convergence' and was first proposed by the London based Global Commons Institute.

Even though this approach would mean developing countries would have to accept limits on their emissions, it could also provide them with funds to develop. Many developing countries would be allocated larger emission entitlements than they currently need. Under a global emissions trading system they could sell these emissions rights to help pay for their development.

For the UK, this would imply deep cuts in carbon emissions over the coming decades. The Government has already set an ambitious target of cutting its carbon dioxide emissions by 60 per cent by 2050 and is arguing that other countries should follow suit. The UK should champion the idea of setting emission entitlements on a per capita basis on the international political stage. Leadership from the Prime Minister will be vital not least because the UK Government will be holding the EU Presidency in the second half of 2005 when the international community will be considering how to take Kyoto forward.

Climate protection: helping poor countries adapt to unavoidable climate change

Some climate change is now inevitable because of the impact of past, present and continuing emissions. Increases in climate variability will increase the risk of extreme weather related events causing

disproportionate impacts on the most vulnerable people in the poorest countries. This is in large part because they have the least capacity to adapt to the effects of weather related disasters and can rarely afford insurance.

DfID's action on climate change has been focused on helping to build the resilience of developing communities to the risks posed by weather related events. Adaptation strategies have included developing early warning systems, building flood and coastal defences as well as adapting land-use to limit the effects of heavy rainfall or droughts on farming. There is a growing awareness that disaster preparedness should be community-based, enhancing local livelihoods and capabilities.

It is important and right that developed countries should help strengthen the ability of vulnerable communities to protect themselves from the impacts of climate change. Nonetheless, adaptation strategies should not be the Government's only means for integrating climate change into development policy.

Changing investment: from fossil fuels to renewable power

For developing countries, climate change increases the urgency of finding more sustainable pathways to development. Every year, industrialised countries provide loans, export credits and other subsidies channelled through various international agencies to support billions of pounds of investment to exploit fossil fuel reserves. The World Bank has invested over US\$ 26.5 billion in fossil fuel projects since the Climate Change Convention was signed in 1992. These projects, through their lifetime operations, are expected to release over 48 billion tonnes of carbon dioxide, twice the global emissions of carbon dioxide from the consumption of fossil fuels in the year 2000 (Institute for Policy Studies 2003).

The Export Credits Guarantee Department (ECGD) underwrites billions of pounds of exports from British companies every year and is accountable to Parliament through the Secretary of State for Trade and Industry. A recent review of the ECGD found that despite a commitment to take sustainable development into account when considering applications for support, the ECGD's portfolio remains dominated by projects in unsustainable sectors such as the oil and gas sector (EAC 2003).

Whilst developing countries would not want to be denied options that are available to developed countries, there is a danger that existing subsidies for fossil fuels could push developing countries into development paths that will not be environmentally sustainable or meet their long term needs. This point was reinforced by the House of Commons International Development Committee (2002) which stressed that 'work undertaken to mitigate the effects of greenhouse gases should not be undermined by other policies, such as support given to fossil fuel projects where suitable alternatives exist.' It recommended that DfID should press multinational agencies to consider how energy sources could be used more efficiently and, where appropriate, donors could foster the use of renewable energy.

At least 1.6 billion people live without access to adequate energy services (IEA 2000), either because they live in remote areas or because they are too poor to pay for services on offer. That so many people exist without adequate energy is socially unjust. But that need must not be met at the expense of global climatic stability. Renewable energy has considerable potential to meet future energy needs and will be essential if increased use of energy in developing countries is not to worsen greenhouse gas emissions.

Nations at the World Summit on Sustainable Development in Johannesburg in 2002 agreed, with a sense of urgency, to substantially increase the global share of energy coming from renewable sources. Some 40 states, including those in the European Union, supported a joint declaration expressing a strong commitment to the achievement of this objective, and another 40 have now joined the 'Johannesburg Renewable Energy Coalition.' The UK should play an active role in the Johannesburg Renewable Energy Coalition. Through its relationship with multinational agencies, like the World Bank, it should phase out lending to fossil fuel projects and promote renewable energy both in developing and industrialised countries.

A final thought

A key manifesto pledge should be to work with other nations in building international support for action that will keep temperature increases to no more than 2°C above pre-industrial levels. Climate change is responsible for unjustified inequalities through increased exposure to

extreme weather events that inevitably worst affect the poor and most vulnerable in society. But trading shorter term responses to disasters against the longer term need to address the causes of climate change is not a stable platform from which to advance sustainability. The Government has quite rightly established poverty reduction as an overarching purpose of British development assistance. In taking forward its international development policies, the Government will need to better link poverty reduction with climate change concerns and the provision of energy subsidies that are likely to better benefit poorer people over the decades to come.

References

- Beckett M (2003) 'A Stitch in Time. UK action to tackle climate change' in *New Economy* ippr
- Blundell T (2003) 'An Energetic Welcome: The UK energy challenge' in *New Economy* ippr
- CAN (2002) *Preventing Dangerous Climate Change* Climate Action Network
- DfID (2000) *Eliminating World Poverty: Making globalisation work for the poor* Department for International Development
- DfID (1997) *Eliminating World Poverty: A challenge for the 21st Century* Department for International Development
- DfID Select Committee (2002) *Global Climate Change and Sustainable Development* Report from the House of Commons Select Committee for International Development
- EAC (2003) *Exports Credits Guarantee Department and Sustainable Development* Report by the House of Commons Environmental Audit Committee.
- IEA (2000) *World Outlook 2000* International Energy Agency
- IFRC (2002) *World Disasters Report 2002* International Federation of Red Cross and Red Crescent Societies
- IFRC (2001) *World Disasters Report 2000* International Federation of Red Cross and Red Crescent Societies
- Institute for Policy Studies (2003) *The World Bank and Fossil Fuels: At a crossroads* Institute for Policy Studies briefing
- IPCC (2001a) *Climate Change 2001: The scientific basis* Intergovernmental Panel on Climate Change

- IPCC (2001b) *Climate Change 2001: Impacts, adaptation and vulnerability* Intergovernmental Panel on Climate Change
- UN (2002) Report of the World Summit on Sustainable Development Johannesburg, 26.8.02-4.9.02
- UN (1992) *Framework Convention on Climate Change* Article 2
- US NOAA (2000) *Hurricane Mitch 22 October–5 November 1998* National Hurricane Centre, United States National Oceanic and Atmospheric Administration
- Walker G, Fairburn J, Smith G and Mitchell G (2003) *Environmental Quality and Social Deprivation* R&D Technical Report, Environment Agency
- Walter J and Simms A (2002) *The End of Development? Global warming, disasters and the great reversal of human progress* New Economics Foundation and Bangladesh Centre for Advanced Studies

5. Creating a sustainable and fair energy future

Julie Foley

The right to clean and safe energy lies at the heart of our understanding of a sustainable and fair future. There is little doubt that the Energy White Paper, titled *Our Energy Future – Creating a low carbon economy* (DTI 2003a), has reinforced the UK's position as a global leader in sustainable energy policy. Not only did the Energy White Paper put climate change at the heart of energy policy but it also recognised that a low carbon future was possible without resorting to nuclear power.

The Energy White Paper heralded a new era in energy policy acknowledging that with greater energy efficiency and renewable energy use we could meet our security of supply and climate change objectives. As part of the UK Climate Change Programme, the Government had already set a target to reduce carbon dioxide emissions by 20 per cent by 2010. It also set a target requiring electricity suppliers to increase the proportion of electricity provided by renewable sources to ten per cent by 2010 (DETR 2000).

Many environmental groups and renewables investors were disappointed that the Energy White Paper did not also set a firm target for renewable electricity use in 2020. But the Government did state that its 'aspiration' was for 20 per cent of electricity to come from renewable energy sources by 2020. Significantly, the Energy White Paper also put the UK on a path to achieving a 60 per cent cut in carbon dioxide emissions by 2050, as recommended by the Royal Commission on Environmental Pollution.

Heading in the right direction

After nearly two terms in office, the Government appears to be making good progress with its 1997 manifesto commitment to 'promote cleaner, more efficient energy use and production, including a new and strong drive to develop renewable energy sources' (New Labour 1997).

Despite strong opposition from sections of the business community, the Climate Change Levy (CCL), a business energy tax, was introduced in 2001. The CCL and its associated measures, to encourage businesses to use energy more efficiently and reduce greenhouse gas emissions, are expected to save five million tonnes of carbon by the end of this decade (HM Treasury 2004). But, the levy is now lower in real terms than when it was introduced and so further stimulus will be needed if energy efficiency is to remain a priority for businesses.

In 2002, the UK introduced the world's first emissions trading scheme and in 2005 we will be participating in the European wide scheme. In July 2003, the Government backed up its commitment to renewables when Rt Hon Patricia Hewitt MP, Secretary of State for the Department of Trade and Industry (DTI), announced plans to build more than 2,000 giant wind turbines off the Thames Estuary, the Greater Wash along the east coast and the north west of England: enough to supply the electricity needs of one in six UK households (DTI 2003b).

In the coming years, the focus will be on delivery. Ensuring that the Government remains on track to achieve its longer term aspirations for energy efficiency and renewables will be critical. In some cases delivering on these objectives will offer both environmental and wider social and economic benefits. For instance, new and emerging renewable industries could help to regenerate areas that have fallen into decline by encouraging new employment opportunities. It is, however, important not to overstate these potential employment benefits and acknowledge that the principal driver for investment in renewable energy should always be climate change.

A tricky area for the Government is in relation to planning and renewables and how to reconcile local concerns about the possible visual intrusion of wind farms with national interests to advance renewable energy generation. There are other areas within energy policy where safeguards may be needed to protect the interests of low income or vulnerable groups. The DTI projects that energy prices could start to rise in the period to 2010 (DTI 2004a). A concern is that rising energy prices could potentially make it more difficult for the Government to reduce the number of households in fuel poverty which is a key social justice pledge.

Turning up the heat

In 2001, the domestic sector accounted for about a third of total energy consumption, higher than the transport, industry or service sectors (DTI 2003c). The Energy White Paper recognises that the cheapest, cleanest and safest way of addressing energy policy objectives is to use less energy. The Government's Climate Change Programme expects savings of five million tonnes of carbon to come from improvements in household energy efficiency between 2000 and 2010 (DETR 2000). The Energy White Paper forecasts another four to six million tonnes of carbon savings to come from further take up and development of home insulation measures between 2010 and 2020. About a quarter of the total carbon savings in the Energy White Paper are expected to come from improvements in domestic energy efficiency (DTI 2003a). Significant advances in the energy efficiency of households will therefore be critical to meeting our climate change targets.

The Energy White Paper and the Energy Green Paper, issued by the European Commission in 2002, both place an emphasis on 'doing more with less' and 'decoupling' economic growth from energy use through greater energy efficiency particularly in the domestic sector. This Government has, however, distinguished itself from the rest of Europe by making the link between improvements in household energy efficiency and alleviating fuel poverty. The Government has rightly made fuel poverty a social justice priority for energy policy.

Despite being one of the richest countries in the world, there are a significant number of households in the UK that cannot afford to heat themselves adequately. In 2001, there were an estimated 3 million UK households in fuel poverty, of which two million contained people aged 60 years or over, a child under 16 years, a disabled person or someone suffering from a long-term illness (DTI 2003c). A fuel-poor household is defined as needing to spend more than ten per cent of its income on heating. The fuel poor tend to live in housing with inadequate insulation or less efficient heating systems. This means they often spend a disproportionate amount of their disposable income on keeping warm, and so going without other necessities, or else opting to save money by staying cold.

A significant proportion of preventable illness and deaths in the UK are caused by people living in damp and cold housing suggesting that

fuel poverty is not just a priority for energy policy by public health policy. It is estimated that 40,000 more people die in winter (December to March) in the UK than would be expected from death rates occurring over the rest of the year. Over half of these deaths are from heart attacks and strokes and the rest are from respiratory diseases, influenza and hypothermia. Each winter a higher proportion of the UK population die as a direct result of unseasonal cold weather than in either Finland or Russia (Faculty of Public Health 2003).

Combating fuel poverty

The UK Fuel Poverty Strategy set a target to eliminate fuel poverty by 2016 and to eliminate it in vulnerable groups by 2010. Central to this strategy has been the Warm Front scheme, which costs on average £150 million per year, and provides grants for heating and insulation to improve the energy efficiency of households (DTI and DEFRA 2001). There is also a Public Service Agreement (PSA) to 'reduce fuel poverty among vulnerable households by improving the energy efficiency of 600,000 homes between 2001 and 2004' (DEFRA 2001). It is unclear however how this PSA relates to the longer term target to eradicate fuel poverty. Indeed, the target of eliminating fuel poverty is in itself a moving one as there will be new households becoming fuel poor each year and so the process of combating fuel poverty will be an ongoing challenge.

In recent years, there have been reductions in fuel poverty numbers but these are largely thanks to other Government policies, such as cutting VAT on fuel and the New Electricity Trading Arrangements (NETA) that have cut fuel bills, rather than the Warm Front grants. Unlike its predecessor, the Home Energy Efficiency Scheme, the Warm Front scheme was designed to alleviate fuel poverty not just improve household energy efficiency.

A recent review of the Warm Front scheme by the National Audit Office suggested that only 14 per cent of grants were actually reaching the least energy efficient households and that there was limited targeting of grants towards those most in need (NAO 2003). It identified that part of the problem is that the eligibility criteria for Warm Front grants does not correspond to fuel poverty in many cases. 'Passport benefits' like Income Support, the Working Families Tax Credit, Housing Benefit

and the Disability Living Allowance are chosen on the basis that they help to identify vulnerable groups. But some of these benefits can be rather crude proxies for fuel poverty. For example, many middle-income families claiming the Working Families Tax Credit may not be fuel poor whilst the Disability Living Allowance is not means tested and so is not actually a good indicator of fuel poverty.

The Warm Front scheme is currently neglecting many fuel poor households who are either 'near-benefit' or not claiming the benefits they may be entitled to. As long as these fuel poor groups fall out of the Warm Front scheme, the Government's ability to meet its long-term target to eliminate fuel poverty by 2016 will be threatened. In addition, the heating and insulation measures available under the scheme may not be well suited to some fuel-poor households. The so called 'hard to treat' fuel poor include homes with solid walls, homes with no loft space or homes without a connection to a low cost fuel such as oil or gas. For instance, 44 per cent of fuel poor households in England are without a cavity in their outside walls and so cannot benefit from cavity wall insulation (NAO 2003).

Despite these drawbacks, there is evidence that the Warm Front scheme is making some differences. Since the scheme was launched in 2000, it has assisted more than 500,000 homes with insulation and heating measures (DTI and DEFRA 2003). But, there is a clear need to better link the evaluation of Warm Front grants to how well they are contributing to the delivery of the UK's Fuel Poverty Strategy. Better targeting of grants to those homes most in need and suitable options for hard to treat homes would enable the Warm Front scheme to more effectively lift people out of fuel poverty.

In addition to the Warm Front scheme, the Government has also introduced an Energy Efficiency Commitment (EEC) for domestic energy suppliers which runs until 2005. Each supplier has an energy saving target which they can meet by encouraging householders to install energy saving measures, for example, by subsidising the cost of installing a condensing boiler or energy efficient lighting. At least half the target must be met in households whose occupants are either on a low income or disabled. The Energy White Paper recognised that extending the Energy Efficiency Commitment to run from 2005 to 2008, at possibly twice the level of activity, could help to develop new markets in 'energy services' (DTI 2003a). This is where rather than

simply selling gas or electricity, energy companies focus on what the customer wants – such as warm rooms or hot water – and offers the most cost effective service for achieving that outcome. To date, the development of energy services has been slow.

Rising energy prices on the horizon

The Dutch have taken a different approach and in 1996 introduced a domestic energy tax which has proven to be very effective at reducing energy use. In the Netherlands the housing stock is generally much newer and better insulated than in the UK. In light of the poor energy efficiency of the much of the UK's housing stock there have been concerns that a domestic energy tax could unfairly impact on the fuel poor. Recent proposals for a domestic energy tax have therefore included the idea of the Government borrowing the money to finance a five-year crash programme to eliminate fuel poverty, then introducing the tax and using the proceeds to pay off the loan (Fabian Society 2000). It is questionable, however, if there would be enough sufficiently skilled people available to insulate enough homes in five years. In addition, the Warm Front scheme has already found that it is not necessarily easy to identify quickly those fuel poor households most in need.

Introducing a domestic energy tax in the not too distant future is unlikely given energy prices are forecast to start rising. The DTI expects that a number of measures outlined in the Energy White Paper, including achieving our renewable electricity aspirations, extending the Energy Efficiency Commitment and participation in the European emissions trading scheme, could all contribute to rising energy prices. It forecasts a steady rise in electricity and gas prices over the period to 2010 (DTI 2004a). If energy prices start to rise significantly, it will be politically impossible to introduce a domestic energy tax. There is no doubt that the Energy White Paper measures are essential for reducing greenhouse gas emissions and increasing energy efficiency. But their contribution to increasing energy prices could potentially make it even more difficult to meet the Government's fuel poverty pledge. This serves to underline the importance of revising the eligibility criteria for Warm Front grants and providing energy efficiency options appropriate for hard to treat homes.

A crucial blow: wind power, jobs and communities

There is growing political interest in the contribution the renewables industry could make in reducing greenhouse gas emissions and creating employment opportunities. A recent report by the DTI and Scottish Executive highlighted that there are already 8,000 jobs sustained by the renewables industry in the UK. Assuming the Government achieves its 2020 aspiration to increase renewable electricity use to 20 per cent, then the report suggests the renewables industry could potentially account for between 17,000 to 35,000 jobs (DTI 2004b). The majority of these jobs are likely to come from the UK's growing wind market with wind technologies being the most cost effective low carbon option for achieving the Government's renewables aspiration.

Denmark is already years ahead of the UK in capitalising on the economic benefits of the wind industry. Danish wind turbine companies now have a market share of half the world market with a turnover of 3 billion Euro (about £2 billion) and account for 16,000 jobs in Denmark alone (Danish Wind Power Association 2003). The huge wind resource in the UK represents manufacturing investment opportunities especially in wind turbines.

The offshore wind industry has already proven to be a catalyst for local economic regeneration. In May 2003, the Arnish fabrication yard in Stornaway, on the Isle of Lewis, was re-opened and will be constructing wind generators for Scroby Sands. The Scroby Sands development will produce enough electricity to power 41,000 homes in the Great Yarmouth area. For Arnish, winning this contract has been pivotal to attracting much needed inward investment and jobs (DTI 2003d). The Government's recent announcements for even larger offshore wind farms off the Thames Estuary, Greater Wash and the north west of England should help to give the wind industry greater confidence to invest in the UK and locate their manufacturing facilities here rather than rely on turbine suppliers overseas.

Onshore wind technologies are almost already cost effective with fossil fuel power. Yet whilst the Government moves up a gear in promoting offshore wind, well-trying and proven onshore wind technologies languish behind. One of the major reasons why the Government sees offshore wind as the UK's biggest hope is because of the problems developers have encountered with obtaining planning

permission for onshore wind farms in the face of local opposition.

This has been a particular concern in Scotland where there are plans to expand renewable electricity to supply 40 per cent of Scotland's total electricity needs by 2020. However, a survey by MORI Scotland commissioned by the Scottish Executive found that the majority of Scots already living close to an existing wind farm site would be in favour of more wind power. Prior to the wind farm development, 61 per cent of respondents had envisaged problems caused by traffic, noise and obstruction of the landscape, but only 22 per cent actually found they experienced such problems (MORI Scotland 2003).

Onshore wind developments present policy makers with a difficult choice about whether they should be siding with the developer or with local communities. It would be unhealthy for local democracy if a precedent was set that local views should not be accounted for when assessing planning applications for either onshore or near-shore wind farms. It remains a democratic right that communities should have a say on major developments that affect their local areas. In some cases, however, the Government may need to make tough choices about whether the anti-wind attitudes of a vocal minority should over-ride national and international interests to encourage renewable electricity generation and reduce greenhouse gas emissions.

Within the UK, onshore wind developments illustrate the classic political dilemma of how to balance the rights of individuals against the rights of wider society. When viewed from an international perspective, however, the social justice case for rapid investment in renewable energy is clear. It is widely appreciated that the main 'losers' of our continued dependency on fossil fuels will be developing countries least able to adapt to the impacts of climate change. The steps the UK takes to promote lower carbon renewable energy sources are therefore part of a global effort to tackle the unjustified inequalities caused by climate change.

Encouraging innovation in future low carbon industries

In 2002, the Government introduced the Renewables Obligation in England and Wales to incentivise generators to supply progressively higher levels of renewable energy over time. The Renewables Obligation primarily supports the most competitive forms of renewables such as

wind power. But other renewable technologies – like wave, tidal, solar and some biofuels – tend to be neglected because they are some way off from being commercially viable. The risk is that without more government support for product development and commercialisation, through for example demonstration projects and venture capital funds, the UK could lose out and new and emerging renewable technologies could be developed elsewhere.

The same risk is true of hydrogen fuel cells. In the last ten years around £90 million has been spent on fuel cell projects in the UK, although only £12 million came from government sources (Copper *et al* 2003). Compared to other industrialised countries this spending is limited. For instance, the Canadian Government spends around C\$34 million (£15 million) per year on hydrogen and fuel cell research and industry development. Since 1996, the Canadian Government has allocated C\$60 million (£25 million) to 'Industry Canada' a programme for attracting foreign investment into Canada's fuel cell sector (Hart *et al* 2002). In 2003, President Bush proposed a fuel cell and hydrogen vehicle research and development programme worth \$1.7 billion (£1 billion) over the next five years (US DoE 2003). Environmental campaign organisations have, however, been sceptical about whether his motives are driven by concerns about climate change because it appears the United States administration is particularly interested in producing hydrogen from oil based sources.

Supporting the development of future renewable and other low carbon technologies should be integral to the Government's innovation strategy. Staking out a leadership position in the research, development and commercialisation of new and emerging energy sources, like wave and hydrogen power, could potentially offer new employment opportunities in the UK. It is, however, important not to overemphasise these potential economic benefits and continue to ensure that dealing with climate change remains the primary objective for additional investment in renewable and other low carbon technologies.

Staying on track

Setting out a framework for the transition to low carbon energy has been one of this Government's headline achievements and in many respects it is a case of keeping up the good work. The Government's

longer term aspirations for improving energy efficiency, in both the domestic and commercial sectors, and increasing renewable electricity use are ambitious and staying on track will require sustained investment. Planning permission for major wind developments is likely to remain politically contentious especially in locations where there is local opposition. Meeting the policy commitments laid out in the Energy White Paper is likely to contribute to an increase in energy prices which could be politically unpopular. It may also make it more difficult for the Government to keep its pledge to eliminate fuel poverty amongst vulnerable groups by the end of this decade. Reconciling the potential trade-offs between energy policy and socially just priorities, such as tackling fuel poverty, will be a key challenge for the Government over the coming years.

References

- Brechling V and Smith S (1992) *The Patterns of Energy Efficiency Measures Amongst Domestic Households in the UK* Institute for Fiscal Studies
- Danish Wind Power Industry Association (2003) *Danish Wind Power Industry* available at the Danish Wind Power Industry website: www.windpower.org
- Copper M, Geiger S and Jollie D (2003) 'Fuel Cells in the UK – A survey of current developments' *Fuel Cell Today*
- DEFRA (2001) *DEFRA Prospectus: Working for the essentials of life* Department for Environment, Food and Rural Affairs
- DETR (2000) *Climate Change: The UK programme* Department for Environment, Transport and the Regions (DETR), Scottish Executive, National Assembly for Wales and Department for Environment in Northern Ireland
- DTI (2004a) *Creating a Low Carbon Economy: First annual report on implementation of the Energy White Paper* Department of Trade and Industry
- DTI (2004b) *Renewable Supply Chain Gap Analysis* Department of Trade and Industry in association with the Scottish Executive
- DTI (2003a) *Our Energy Future – Creating a low carbon economy* Energy White Paper, Department of Trade and Industry
- DTI (2003b) 'Hewitt Announces Biggest Ever Expansion in Renewable Energy' Department of Trade and Industry Press Release, 14.7.03

- DTI (2003c) *UK Energy Sector Indicators* A supplement to the Energy White Paper *Our Energy Future – Creating a low carbon economy* Department of Trade and Industry
- DTI (2003d) ‘Renewables Revolution Revives Arnish’ Department of Trade and Industry Press Release, 22.5.03
- DTI and DEFRA (2003) *The UK Fuel Poverty Strategy* First Annual Progress Report, Department of Trade and Industry and Department of Environment, Food and Rural Affairs with the Department for Social Development, Scottish Executive and Welsh Assembly Government
- DTI and DEFRA (2001) *The UK Fuel Poverty Strategy* Department of Trade and Industry and Department of Environment, Food and Rural Affairs
- EC (2002) *Towards a European Strategy for the Security of Energy Supply* Green Paper, European Commission
- Fabian Society (2000) *Paying for Progress* Fabian Society
- Faculty of Public Health (2003) ‘Current Cold Snap Will Lead to Over 2,500 Unnecessary Deaths, Warn Public Health Doctors’ Media Briefing, Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom
- Hart D, Greaves C, Pointon K, Spangler A, Hayter D, McGrath D, Rennie A and Wright D (2002) *Fuel Cells – The Canadian experience* produced for the Department of Trade and Industry International Technology Service Mission Report and Synnogy Ltd
- HM Treasury (2004) *Budget 2004: Prudence for a Purpose: a Britain of stability and strength* HM Treasury
- MORI Scotland (2003) *Public Attitudes to Wind Farms: A survey of local residents in Scotland* MORI Scotland survey for the Scottish Executive
- NAO (2003) *Warm Front: Helping to combat fuel poverty* Report by the Comptroller and Auditor General, HC 769 Session 2002-3, 25.6.03
- New Labour (1997) *Because Britain Deserves Better* 1997 General Election Manifesto
- US Department of Energy (2003) *Fuel Cell Report to Congress* ESECS EE-1973

6. Getting out of the mess we're in: combining sustainability and social justice in waste policy

Simon Dresner and Paul Ekins

Growing amounts of waste are produced in the UK each year. The European Landfill Directive requires large reductions in the amount of biodegradable waste being sent to landfill. But waste production is growing faster than diversion from landfill so that the amount of municipal waste (including household, commercial and industrial waste) is actually increasing. A major resource efficiency challenge for the Government will be to work with local authorities in reducing landfill and tackle rising waste disposal costs.

The UK needs to change the way it deals with waste for the sake of the environment and in order to meet the requirements of the Landfill Directive. Government support for sustainable waste management options will, however, be influenced by their social justice implications. Socially deprived areas produce as much waste as richer ones and they recycle less. Charging households according to the amount of unsorted residual waste they produced would not only encourage increased recycling rates, it could reduce the total amount of waste produced and could save money. The Government has been unenthusiastic about taking up this idea partly because of the negative impacts charging could have on poorer households. But this is not necessarily a politically obstacle as any regressive impacts could be dealt with through a mechanism using tax credits and benefits to compensate poor households that might otherwise be made worse off.

The mess we're in

Household waste production in the UK is currently growing at a rate of three per cent per year, exceeding the rate of growth of Gross Domestic Product (GDP), a trend which is unsustainable environmentally and politically. Some parts of the UK are already facing acute waste

management problems. In the growth areas of the South East, there is concern whether local authorities will be able to keep pace with the speed of new housing developments and the resulting demands for more waste management facilities. On the basis of current trends in the South East, the total amount of waste managed by the South East could grow by over 20 per cent in the next 20 years (SEERA 2003).

The European 'waste hierarchy' places waste reduction or minimisation first, then reuse and recycling (materials recovery), then recovery of energy (through incineration of waste), then incineration of waste without energy recovery and finally disposal of residual waste to landfill. The UK has historically relied upon landfill as its primary waste disposal option. Compared to most other industrialised countries the UK has a poor record of developing alternatives to landfilling and on recycling. Some other European countries, such as the Netherlands, Switzerland and Germany, already recycle half their municipal waste, while in 2001-2 England recycled only 13 per cent (Strategy Unit 2002; DEFRA 2003a). Factors underpinning the UK's poor environmental performance on waste have included the ready availability of cheap landfill sites, weak regulatory controls and the absence of incentives for recycling. In addition, low public awareness and an inability or unwillingness on the part of many local authorities to invest in more expensive recycling and waste management options, such as biomass technologies, fed with organic wastes, have also played a role.

Until the European Union adopted the Landfill Directive in 1999, waste policy was afforded little attention by either national or local government. Challenging European targets have drawn waste management issues to the attention of local and national policy makers. The Landfill Directive requires the UK to reduce the amount of biodegradable waste going to landfill to 75 per cent of that produced in 1995 by 2010, 50 per cent by 2013 and 35 per cent by 2020. The UK is currently not on track to meet these targets and is actually heading in the opposite direction. Although the proportion of municipal waste disposed in landfill declined from 84 per cent in 1996-7 to 77 per cent in 2001-2, the amount actually increased from 20.6 million tonnes to 22.1 million tonnes (DEFRA 2003a). Failure to meet the targets set in the directive by a large margin would cost the Government hundreds of millions of pounds a year in fines.

The Waste Strategy 2000

In response to the Landfill Directive, the Government's Waste Strategy 2000 for England and Wales (DETR 2000) set the following targets:

- To reduce the amount of industrial and commercial waste landfilled to 85 per cent of 1998 levels by 2005;
- To recycle, compost or incinerate 40 per cent of municipal waste by 2005, 45 per cent by 2010 and 67 per cent by 2015;
- To recycle or compost at least 25 per cent of household waste by 2005, 30 per cent by 2010 and 33 per cent by 2015;
- To reduce the amount of biodegradable waste going to landfill to meet the requirements of the Landfill Directive.

Several levers were set out in the Waste Strategy. The Waste and Resources Action Programme (WRAP) was set up to overcome market barriers to promoting re-use and recycling. The strategy of moving away from landfill was supported by the 1999 Budget, which announced that the standard rate of Landfill Tax would increase from £10 per tonne by £1 per tonne per year up to and including 2004-5.

The targets in the Waste Strategy for recycling or composting of household waste are to be achieved by statutory performance standards for local authorities responsible for waste disposal, essentially requiring them to double the rate of recycling and composting. The Waste Strategy proposed a system of tradable permits for the landfill of biodegradable municipal waste to be allocated free to local authorities. The scheme has now been set up. The aim is to enable local authorities to meet their targets under the Landfill Directive with greater flexibility and at lower cost.

Nonetheless, comparing the targets set in the Waste Strategy 2000 with actual progress by 2001-2, the evidence suggests we are not yet on track to meet the targets for 2005 (DEFRA 2003a).

The Strategy Unit report

In 2002, the Cabinet Office Strategy Unit issued a report making a number of proposals for future waste policy (Strategy Unit 2002). These included:

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- reducing the rate of household waste growth from 3 per cent to two per cent per year by the end of 2006;
- 50 per cent of households carrying out home composting by 2006;
- the nationwide roll out of kerbside recycling collections;
- a target of at least 35 per cent of household waste being composted or recycled by 2010 and at least 45 per cent by 2015;
- an absolute reduction in the amount of municipal waste going to landfill by 2007;
- 30 per cent of local authorities to have tried incentive-based schemes for household waste by 2005-6;
- an increase in the Landfill Tax over time to £35 a tonne in order to change behaviour.

The Chancellor has subsequently announced that he will increase the landfill tax by £3 a tonne per year from 2005's level of £15 per tonne until it reaches £35 per tonne. The Government accepted the majority of the Strategy Unit's recommendations (DEFRA 2003b), but not its proposal for local authorities to be allowed to charge households according to the amount of waste they produced, which was said to require further work.

The Strategy Unit report highlighted that the ever-increasing production of waste combined with the requirement of the Landfill Directive, to reduce radically the amount of biodegradable waste sent to landfill would substantially increase the cost of waste management. The Strategy Unit estimated that the cost of implementing its proposals would be only about ten per cent greater for local authorities than the costs of continuing present waste disposal practices. On the basis of current trends, by 2020 the costs of the Strategy Unit's proposals would be £29.6 billion compared to £26.7 billion under 'business as usual' practices (Strategy Unit 2002).

The impacts of waste management options: incinerators and landfills

There is a great deal of controversy about the health impacts of both incinerators and landfills.

Incinerators are very unpopular with the public and almost invariably meet with intense local opposition when they are proposed. The US National Research Council (1999) reported that most epidemiological studies that have tried to establish a link between an incinerator and illness in the surrounding area have been unable to detect any adverse health effects. This was supported by the findings of the Department of Health's independent expert advisory Committee on the Carcinogenicity of Chemicals in Food Consumer Products and the Environment (COC). It advised that any potential risk of cancer due to residency (for periods in excess of ten years) near to incinerators was exceedingly low and probably not measurable (COC 2000).

A report by the Institute for European Environmental Policy (IEEP), produced for the National Society for Clean Air (NSCA), examined the epidemiological evidence and concluded that 'the potential for impacts on the health of local populations is extremely small' (IEEP/NSCA 2001). It argued that although there may be some background health effects that could not be detected in epidemiological studies, the amounts of air pollution produced by incinerators, since the new European regulations in 1996, are now much lower. The report was, however, criticised by environmental campaign groups, such as Greenpeace, who argued that it was based on an incomplete survey of the literature and that its conclusions were based on the unproven assumption that modern incinerators actually have lower emissions in operation than older incinerators had (Johnston and Santillo 2001).

A survey by Friends of the Earth (2004) found that out of the fourteen incinerators operating in England, nine are located in the most deprived 20 per cent of wards. However, recent applications for permission to build incinerators do not appear to be biased towards poorer wards. It may be that it is easier to get permission in poorer wards which are more likely to already have industry located there. The relationship between incinerators and social injustice is therefore unclear. It is known neither whether poor wards get incinerators because they are poor nor whether incinerators actually contribute to economic decline.

Research funded by the Government (Elliott *et al* 2001) found that 80 per cent of the population lives within two kilometres of a landfill site. It examined the health effects of proximity to landfill from medical records of eight million births in England between 1983 and 1998.

Taking account of the differences in deprivation, it was found that there was still a one per cent overall increase in the risk of birth defects less than two kilometres from a landfill, although some birth defects appeared to be several per cent more common and others appeared to be several per cent *less* common. Comparison of levels of birth defects in each area before and after the opening of a landfill found that most types of birth defect became less common or stayed the same, but low birth weight and neural tube defects increased by six and seven per cent respectively. The Department of Health's expert advisory Committee on Toxicity (COT) argued that it was not possible to draw firm conclusions on the possible health effects of landfills from the results of this research. However, they recommended that further investigation on health outcomes in populations living around landfill sites was needed (COT 2001).

Whilst there is some evidence to link landfill sites with deprivation, the correlation is not very strong. The same study found that the areas within two kilometres of a landfill are slightly more likely than average to be deprived, but the areas more than two kilometres from a landfill are rather less likely to be deprived. Only 23 per cent are in the most deprived third of wards (Elliot *et al* 2001).

Most environmental campaign groups campaign against both incinerators and landfills, but appear to devote more effort to campaigning against incinerators particularly on public health grounds. The public seems to have a heightened sense of dread about incinerators despite the fact they are relatively uncommon. There appears to be less public concern about landfills even though about 80 per cent of the UK population lives near to one (Elliot *et al* 2001).

Whilst it is the public health and social issues relating to incinerators that have received the most attention by campaign groups and the media, it is perhaps their strategic implications for waste management options that are of most importance. Incinerators could potentially reduce the incentive for local authorities to pursue recycling options proactively and minimise waste production. The capital costs of incinerators are very large compared to those of other disposal options (Ecotec 1999), which means an incinerator has to be operated for many years to justify the capital costs. What is more, incinerators (like many industrial processes) are more economic on a very large scale of around 100-200,000 tonnes of waste a year. The 'proximity principle' for

municipal waste means most or all of that waste is expected to come from within the local authority responsible. Contracts for incinerators can also lock local authorities into long-term contracts.

The Government's primary concern is to meet the requirements of the Landfill Directive. It is widely thought that it will be difficult to meet the requirements of the Landfill Directive without an expansion in incineration because it would require even higher levels of recycling and composting. From an environmental perspective, it is clear that the Government considers incineration to be environmentally preferable to landfill. On the other hand, it would be politically difficult to increase levels of incineration in the UK very far given the intense public opposition.

Strategically, from the point of view of the waste hierarchy, incinerators can only be justified if they draw in residual waste from a wide area, not if they soak up most of the waste in a particular authority to the detriment of recycling. The Strategy Unit (2002) advocated an increase in incineration, but it also suggested that alongside an increase in the landfill tax, an incineration tax should be considered to avoid creating incentives for incineration ahead of recycling. The Government is currently considering the option of an incineration tax. It is difficult to see a case for allowing incineration to be cheaper than recycling because it would create a perverse incentive for local authorities to invest in incinerators rather than recycling facilities.

Increasing recycling

The local authorities that have so far reported the highest rates of recycling (up to 35 per cent) have targeted garden waste for centralised composting although much of it would probably have been composted at home or left *in situ*. The composting of garden waste is an easy way for authorities to obtain apparently high recycling rates. Among authorities that have not targeted garden waste, the maximum recycling rate is less than 20 per cent (Parfitt 2002).

Recycling rates are often highest in the more affluent local authorities. The authorities with the highest recycling rates are among the least socially deprived, while the authorities with the lowest rates are among the most socially deprived (Parfitt 2002). Groups on lower incomes and/or who are socially excluded are more likely to belong to

the 10-15 per cent of the population who say they would not recycle under any circumstances (MORI 2002). This is unlikely to be because of the nature of the waste they generate. The available evidence, though limited, is that poorer households consume more canned food, while richer households consume more fresh food and food packaged in plastic (University of East Anglia *et al* 2000). Metal cans are easily recycled, while plastic is currently difficult and expensive to recycle.

On the other hand, the choices that individual consumers can make about the disposal of waste are highly constrained by the nature of the waste management and recycling facilities in the places where they live. If there is no convenient means of recycling, then even people who wish to do so may find it difficult. In particular, it has been shown that access to kerbside recycling facilities is a major determinant of household recycling behaviour (Resource Recovery Forum 2002).

About 85 per cent of the UK population says that it is willing to recycle, although the proportion that actually participates is much lower (MORI 2002). The simplest way of creating an incentive for recycling is to provide a flat-rate payment for households that do or a penalty for households that do not. In Switzerland and the American states of Connecticut and New Jersey, it is mandatory for households to sort waste for recycling. Such a measure could be unpopular, but sends a strong political message that not recycling is socially unacceptable behaviour. Recycling rates in Switzerland are amongst the highest in the world. Householders must also pay for each bag of residual waste that they produce. Mandatory recycling is a method of reaching the minority of the population that is not willing and the substantial proportion that is willing but not motivated enough to actually do it.

Life-cycle analysis shows that the total environmental impact of recycling waste is generally lower than that of either landfill or incineration, but of course it is not zero. Recycling facilities have an environmental impact and are not necessarily welcomed by those who live close to them. Opinion poll research suggests that most people believe that recycling has no environmental impact and therefore tend to negate the environmental impact of production (MORI 2002). This kind of magical thinking may explain why the public perceives recycling as a particularly important environmental issue and lifestyle choice.

In reality, recycling does not reduce the total environmental impact of consumption very much. Reducing the use of products or their reuse

are much more sustainable options, but this is not generally well understood. Encouraging companies to use less packaging is also important. But, the challenge for politicians will be the more difficult task of getting people to change their consumption choices, rather than just putting an item in a separate recycling bin instead of an unsorted waste bin. The Government's Sustainable Consumption and Production Strategy (DEFRA 2003c) highlighted that society as a whole needs to change its patterns of consumption, which ultimately means getting more from less. The rapid growth in waste means that, in the coming years, the Government will have an important role to play in developing policies and fiscal incentives that encourage individuals to adopt more sustainable consumption choices.

Greater Government attention should also be focused on encouraging community waste projects. The Leaside Wood Recycling Project rescues and reuses local timber that would otherwise be landfilled, while Green-Works aims to create a bridge between organisations that have redundant office equipment and good causes that need it (SEL 2004). In most cases community waste projects not only help to reduce waste and reuse products; they also offer wider social benefits to local communities. A survey of community waste projects in the UK found that many support low-income families through the provision of low cost furniture or white goods that had been renovated or repaired for reuse. Many also offer training and employment opportunities to people in deprived areas or among marginalised groups (Luckin and Sharp 2003).

Making variable waste charging socially equitable

The obvious way to get people to produce less waste is to charge them according to the amount of waste they produce, known as variable waste charging. The main social concern about variable charging is that it will raise the costs for larger poor households. Recent research comparing waste production by different local authorities suggests that socio-economic variables (including or closely correlated with income) do not influence the amount of waste households produce (Parfitt 2002). Analysis by the Policy Studies Institute for the Joseph Rowntree Foundation reached the same conclusion. It found that households in more expensive homes produce the same amount of waste as

households in cheaper homes, once the size and composition of the households is taken into account (Dresner and Ekins 2004).

Waste charges are currently included in Council Tax. The fact that Council Tax has a smaller range (between the high and low tax bands) than Income Tax, means it is fairly regressive because poorer households pay a higher proportion of their income than richer ones. The average cost of waste management per household at present is about £50 per year. About 75 per cent of local authorities' funding comes from central government block grants rather than Council Tax. The amount of money that is actually paid out of Council Tax for waste services is therefore only about 25 per cent of the total cost.

Most people incorrectly believe that it is cheaper for local authorities to recycle than to landfill waste, so they perceive local authorities' recycling programmes as being motivated not by environmental concerns, but in order to save themselves money at the cost of the public's effort and time (MORI 2002). In fact, if the recycling rate was raised to around 30 per cent – the Government's target for 2010 – then the average cost per household would rise to about £70 per year. If there were variable waste charging then less waste would be produced and a recycling rate of around 45 per cent could be achieved for about £70 per year (Eunomia Research and Consulting 2003).

Since the present costs of household waste management are about £1.2 billion per year, that is the equivalent to an increase of about £500 million to £1.7 billion per year. As the Strategy Unit (2002) recognised, at least this kind of increase in expenditure will be necessary in order to meet the requirements of the Landfill Directive. If this increase in expenditure was to be funded through Council Tax at the same proportions of local to central government funding as at present, central government would need to fund £375 million (three-quarters) of the £500 million increase.

As part of moving towards variable charging for waste, the cost of the waste component of local authority services could be stripped out by a fixed amount per household, so that each household would see a reduction of their Council Tax bill of about £50 (varying according to local authority). Recipients of Council Tax benefit would receive an equivalent payment. The amount of waste that households produce varies according to size. If it is assumed, as discussed above, that average waste costs will rise to £70 per year and the charges are per

kilogram of residual waste then on average (and assuming no waste reduction) one-person households will pay £43 and on average couples will pay £56. If we assume that they have on average received a deduction of £50 in their Council Tax bill, the result is a difference of less than 15p per week either way.

In order to protect larger low-income households, it would be necessary to provide extra benefits for additional members. The average waste bill for a three-person household would be about £85 per year, so an additional £35 a year would be needed to compensate them. The average cost for each of the fourth and fifth members of a household would be about £12 per year. To compensate, 50p per week could be added to Child Tax Credit for all families on benefits and low to medium incomes. The cost of an increase of 50p a week would be approximately £165 million per annum. This would ensure that, on average, larger low-income households did not lose out from variable charging.

If the objective was to ensure that all but the 20 per cent of low-income households with the highest waste production among households of their size and composition did not lose out, there could be an increase of 25p per single person, and 50p per couple in Income Support, Job Seeker's Allowance, and the pensioners' Minimum Income Guarantee. There could also be an increase in the Working Families Tax Credit by 25p per claim and a further increase in the Child Tax Credit of 15p.

The total cost of these measures (including the £165 million for the 50p Child Tax Credit increase) would be about £365 million. Under this scheme, the Government would be spending, through the benefits system, about the same as the £375 million it will need to spend in support grants to local authorities to cover the additional costs of higher recycling rates, if these were to be funded through Council Tax.

In reality, without variable waste charging, central government, local authorities, and ultimately taxpayers, will have to spend far more on waste management and probably still fail to meet the requirements of the Landfill Directive because the growth in waste production is unlikely to be restrained without it. With the appropriate concessions to low-income households, variable waste charging could be a progressive policy measure boosting recycling, reducing total waste production and saving money.

No time to waste

Government policy has so far been focused on the options for managing waste and political and media debate has been dominated by the environmental and social arguments for and against landfills, incinerators and recycling facilities. It is certainly a good idea to increase recycling rates in the UK. But recycling more is not enough if waste production continues to grow exponentially. Greater policy attention needs to be targeted at waste minimisation, which will require changing peoples' consumption choices.

If the Government is to tackle the problem of rising waste disposal costs head on, radical new policy measures will be called for such as variable charging for household waste. Introducing variable waste charging would give people a financial incentive to think about how much rubbish they are creating and the kinds of products they are using. Tax credits and benefits to compensate poorer households would be needed to ensure that variable waste charging is socially just. These concessions would, however, not cost more than what would be needed to cover the additional costs of higher recycling rates in a context of growing household waste generation. So from both an environmental and economic viewpoint variable waste charging presents a 'win-win' policy option, and sensitive design could ensure that there are no negative implications for social justice.

References

- COT (2001) *Advice on the Small Area Health Statistics Unit study on 'Health Outcomes in Populations Living Around Landfill Sites'* Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment
- COC (2000) *Advice on the Small Area Health Statistics Unit study on 'Cancer Incidence near Municipal Solid Waste Incinerators in Great Britain'* Committee on the Carcinogenicity of Chemicals in Food and Consumer Products and the Environment
- DEFRA (2003a) *Municipal Waste Management Statistics 2001-2* Statistical Release 182/03 Department for Environment, Food and Rural Affairs
- DEFRA (2003b) *Government Response to the Strategy Unit Report 'Waste not, Want not'* Department for Environment, Food and Rural Affairs

- DEFRA (2003c) *UK Government Strategy on Sustainable Consumption and Production* Department for Environment, Food and Rural Affairs
- DETR (2000) *Waste Strategy 2000 for England and Wales* Department for Environment, Transport and Regions, The Stationery Office
- Dresner S and Ekins P (2004) *Charging for Domestic Waste: Combining environmental and equity considerations* Policy Studies Institute
- Ecotec (1999) *Beyond the Bin: The economics of waste management options* Ecotec Research and Consulting
- Elliott P, Briggs D, Morris S, De Hoogh C, Hurt C, Kold Jensen T, Maitland I, Richardson S, Wakefield J and Jarup L (2001) *Birth Outcomes and Selected Cancers in Populations Living Near Landfill Sites* The Small Area Health Statistics Unit, Department of Epidemiology and Public Health, Imperial College
- Enviros Aspinwall (2000) *Local Authority Waste Charging Schemes: Best practice evaluation study* Scotland and Northern Ireland Forum for Environmental Research
- Eunomia Research and Consulting (2001) *Financing and Incentive Schemes for Municipal Waste Management – Case studies* European Commission
- Eunomia Research and Consulting (2003) *Waste Collection: To charge or not to charge?* Chartered Institution of Wastes Management Environmental Body
- Friends of the Earth (2004) *Incinerators and Deprivation* Friends of the Earth
- IEEP/NCSA (2001) *Municipal Solid Waste Incineration: Health effects, regulation and public communication* Institute for European Environmental Policy and the National Society for Clean Air
- Johnston P and Santillo D (2001) *Municipal Solid Waste Incineration: Observations on the IEEP report for the National Society for Clean Air* Greenpeace
- Luckin D and Sharp L (2003) *Sustainable Development in Practice: Community waste projects in the UK* University of Bradford
- MORI (2002) *Public Attitudes Towards Recycling and Waste Management: Quantitative and qualitative review* Report for the Strategy Unit, Cabinet Office
- Parfitt J (2002) *Analysis of Household Waste Composition and Factors Driving Waste Increases* Report for the Strategy Unit, Cabinet Office
- Resource Recovery Forum (2002) *Household Waste Behaviour in London* Resource Recovery Forum

72 Sustainable Development and Social Justice

SEERA (2003) *No Time to Waste* Regional Waste Management Strategy Consultation Draft, South East England Regional Assembly

SEL (2004) *Social Enterprise Case Studies* Information from the Social Enterprise London available at www.sel.org.uk

Strategy Unit (2002) *Waste Not, Want Not: A strategy for tackling the waste problem in England* Cabinet Office

University of East Anglia, MEL Research Ltd, Enviros Aspinwall, Lancaster University and University of Luton (2000) *A Study of the Composition of Collected Household Waste in the United Kingdom – with particular reference to packaging waste* Report for the Environment Agency

US National Research Council (1999) *Waste Incineration and Public Health* National Academies Press

7. Farming and food: delivering on sustainability

David Baldock

The last few years have seen a welcome new direction for farming and food policy in the UK, spearheaded by the Department for Environment, Food and Rural Affairs (DEFRA). The Government's Strategy for Sustainable Farming and Food (DEFRA 2002a) emphasised the importance of shifting away from the historical tradition of rewarding subsidies according to levels of production towards farming practices that promote environmental protection.

There could, however, be potential social justice tensions between the higher costs of more environmentally sustainable farming and food production and the costs of food at the retail level, particularly for low income groups. If these additional costs are not to fall wholly on consumers, then continuing to shift the balance of subsidies towards agri-environment schemes and sustainable agriculture will be important.

The Government should be asking questions about the relatively weak negotiating position farmers appear to have with supermarkets. For instance, farmers currently receive a low price for the organic food products they produce relative to the high price consumers pay for them in the supermarket. If social justice is to become a central feature of the Government's sustainable farming and food reforms then fairer returns for farmers will be important.

A new direction for farming and food policy

The peculiarities of traditional agricultural policy can be less than appealing to a Labour administration. While it is one of the last bastions of support for producer interests the constituency it serves lies mainly outside even the extended New Labour canopy. Over the last thirty years the Common Agricultural Policy (CAP) has symbolised inflated food prices, subsidies for some of Europe's largest farmers, a sizeable budget largely outside Treasury control and an impediment to both free trade and the goodwill of many developing countries.

For this government the impetus to engage in a potentially unpromising area was supplied partly by the double disaster of Bovine Spongiform Encephalopathy (more commonly referred to as BSE) followed by Foot and Mouth Disease (FMD) in 2001. BSE and FMD served to reduce confidence both in the products of British agriculture and many of the institutions presiding over it, particularly the Ministry of Agriculture, Fisheries and Food (MAFF). The two outbreaks were a major factor in depressing farm incomes and, in the case of FMD, destabilised many other rural businesses. Expenditure on the agricultural sector increased dramatically, whilst discontent with the food system was at a high point. Over the same period, public awareness of organic farming and farm animal welfare increased significantly, although mainly from the viewpoint of health rather than environment.

Since the watershed of 2001, agricultural policy has been re-launched under the flag of sustainability. In England the independent Policy Commission, established under Sir Don Curry, supplied the rationale and direction for a new approach with their report on *Farming and Food: A sustainable future* (Policy Commission 2002). The Curry report recommended a shift from rewarding over-production to promoting environmental protection and rural amenities. This was largely accepted by the Government in its own policy document, the *Strategy for Sustainable Farming and Food* (DEFRA 2002a). The new agenda in Whitehall emerged in parallel with negotiations on the most recent round of reforms to the CAP. These were brought to a head in June 2003 in a complex agreement based mainly on the European Commission's proposals presented in a familiar refrain: *A Long-Term Policy Perspective for Sustainable Agriculture* (EC 2003).

These documents have several themes in common. Both include a move away from paying subsidies on a 'historical basis' – farmers collecting them today according to how much they have produced in the past – towards a 'flat rate' per acre applied to all farmers regardless of what the land produces. The emphasis is on the provision of public benefits while accepting that substantial support for the agriculture sector will continue to be required. Farmers are required to focus more on supplying the market while meeting the necessary environmental standards.

The Curry report speaks of a new 'settlement' between the farming sector, the other segments of the food chain and the various government departments and agencies engaged in public health and the environment

as well as food production. The Government's strategy looks towards a long term in which farming and food 'may be unsubsidised but not unsupported' (DEFRA 2002a). The CAP reform was based on the principle of 'decoupling' – breaking the link between subsidies and production in order to reconnect farmers to their markets and reduce damaging environmental impacts.

The Government strategy offers some definitions of sustainable agriculture and looks to more cohesive and productive rural communities as one of its key outcomes. Indicators to measure progress will be a 'reduced gap in productivity between the less well performing quartile of rural areas and the English median by 2006' and 'improved accessibility of services for rural people' (DEFRA 2002a). The development of more sustainable agricultural practices and businesses could help to revitalise communities in deprived areas. Environmental indicators cover a broad range of issues, including improvements in river water quality and soil nutrient status. Despite the elevation of sustainability to the central principle of policy, the sense of caution about radical change at farm level is immediately apparent.

Resources for sustainable agriculture

The change in policy has, however, not been confined to rhetoric. The level of expenditure devoted to agri-environment measures, including support for organic farming and less intensive forms of management, has been increased considerably since 1999. Between 2000 and 2006 the Government has committed to spending about £300 million on sustainable agricultural schemes with match funding of a further £300 million from EU CAP sources. One of the headline announcements from the Spending Review 2002-4 was an additional £500 million of funding, from national sources, to kick start the delivery of the Government's Strategy for Sustainable Farming and Food (HM Treasury 2002).

This redistribution of funding has been a courageous step, taken by no other European Union (EU) country apart from France, where it was abandoned following the defeat of the socialist government. It represents a sign of faith in a more positive agenda of rural development and environmental improvement after a long period of budgetary squeeze and focus on farm liberalisation by Conservative administrations.

Nonetheless the level of funding available for sustainable agriculture remains a key concern. Additional funding will be required to meet the Government's commitment to a national 'entry level' agri-environment scheme open to 'as many farmers as possible and, in time, to all' (DEFRA 2002a). This will be the chief means of encouraging and supporting organic, lower input and more sustainable farming practices.

Whilst the majority of northern EU countries have built up sizeable budgets for such policies in the 1990s, drawing about half the cost from the CAP, we have lagged behind. Furthermore, the recent reforms to the CAP include a fixed level of 'modulation', the siphoning of funds from the 'Pillar One' budget for historical support payments to the 'Pillar Two' budget for organic and other more sustainable forms of agriculture. This has been the main mechanism for increasing expenditure on agri-environment measures in recent years.

Now it is proving difficult for the UK to claim a larger share of the relevant CAP funds from the Pillar Two budget. By contrast, those countries that established larger programmes, including Austria and Germany, currently offer more generous support for agri-environment schemes and sustainable agriculture than is available here. Between 2002 and 2006, the UK's Pillar Two budget will be about 1.4 billion Euro compared to Austria and Germany's allocation of around 3.2 billion Euro and 7.3 billion Euro respectively (*Rural Europe Journal* 2003).

The CAP reforms impose a ceiling on modulation from 2007 onwards. From 2007, the UK's share of the Pillar Two budget will be cut by about 33 million Euro per year whilst countries like Austria will see a gain of about 22.4 million Euro per year (*Rural Europe Journal* 2003). Unless the settlement is revisited in 2006 when the next EU budget is agreed this constraint will remain, and the UK will have to rely extensively on national funding to provide targeted support for more sustainable forms of agriculture.

Sustainability and food prices

Agriculture is subject to an array of technological, economic and cultural pressures driving it towards a lower cost, industrialised, more specialist set of enterprises. Globalisation breathes down farmers' necks not only in the market but also in the policy domain where the type and level of

government intervention and support are increasingly influenced by the World Trade Organisation (WTO). Corporate power is steadily more apparent in every link of the food chain. In the US, where the logic of the market has been a much stronger force than in Europe, large specialised corporate farms have taken a sizeable share of primary production.

This model may deliver cheaper food in the short term with real benefits for lower income families who predominantly live in urban areas. But as US experience shows it can lay little claim to sustainability given the pressures placed on the environment, the poor wages in many sectors, and the need to ship food over increasing distances between specialised farms and processors. It stands in clear contrast to European models of 'multifunctional agriculture' with their emphasis on social, cultural and environmental roles for farming alongside food production.

Issues relating to social justice arise both in the separate links of the food chain and in the system as a whole. Concerns have traditionally focused on wages, working conditions, the rights of women and minority groups and the way in which revenues are distributed. It is, however, equally important to consider the share of food prices retained by the primary producer and the quality of the food produced. The Food Standards Agency (FSA) frequently highlights concerns about the health status of children in particular. Given the acknowledged role of highly processed food in contributing to obesity, diabetes and other conditions, it is no longer tenable to assess the cost of food separately from its quality. For consumers, social welfare is derived from access to a varied and balanced diet at a reasonable price.

Accounting for the full costs of food production

Supermarket prices do not currently reflect the full cost of food production. Food prices should be high enough to reflect the costs of following good practice, complying with environmental, food safety and animal welfare standards, and providing wages and conditions attractive enough to keep people in farming. Consumers should be given clear signals about both the true nature and the real production costs of what they are purchasing. At present this is obscured not only by marketing strategies but also by under pricing of, for example, transport costs, and under-compliance with legal standards.

In 2002, 17 per cent of major water pollution incidents in England and Wales were from agricultural sources (Environment Agency 2002a). Groundwaters are vulnerable to leaching of nutrients whilst surface waters can be affected by runoff of pesticides. The annual cost of damage to natural resources from agriculture, including water, air and soil, totals around £1.2 billion per year (Environment Agency 2002b). Poor farming and land management can also increase the risk of flooding in downstream rural and urban areas which tends to affect the most deprived communities the hardest.

As we move towards more sustainable systems, less reliant on agro-chemicals and internalising some of the costs of good farm management, for example through careful crop rotation, the costs of production are likely to rise. At present, many organic and alternative farms are relatively labour intensive and there will be a need to retain labour on farmland if we are to continue to manage a landscape enriched with hedges, ditches, traditional buildings, unpolluted water, increased public access and a diversity of wildlife.

Some aspects of good farm management, such as matching nutrient inputs to the precise requirements of crops, can save rather than impose costs on farmers and many are cost-neutral. Others, whether the conversion to organic farming or simply creating buffer strips along the edges of streams, are more likely to drive costs up. If we adopt policies to encourage the retention of smaller farms and the continuation of agriculture in marginal areas, such as the uplands, we can expect a price penalty at the farm level. Possible future measures, such as taxes on pesticides or nitrates, would have a similar effect.

Environmentalists might argue that these costs should be accepted rather than avoided since they are essential to a more sustainable system. However, there will be tensions between the requirements of a more sustainable farming and food system and the cost of food at the retail level. There are therefore potential trade-offs with environmental and social justice objectives. Low-income individuals and families would inevitably find it difficult to pay more for their food.

Not all costs need to fall on the final consumer. Some can be met by agricultural policies that promote more sustainable systems and reward farmers for contributing to environmental management. The Country Stewardship Scheme provides payments for farmers in England who protect and enhance the landscape, wildlife habitats and conserve

historic features. In 2002, the Countryside Stewardship Scheme had a budget of £60 million (DEFRA 2002b) and there were equivalent schemes for farmers in Scotland, Wales and Northern Ireland. It will be important to continue to shift the balance of agricultural spending so that the majority of support directed at farmers is devoted to schemes of this kind rather than the historical CAP payments linked to production.

There is strong case for society meeting the costs of these schemes which deliver significant public benefits. Opinion poll research suggests that sustainable farming measures are supported by consumers who want farming policy to deliver safe food and a healthy environment (EC 2002). The very reason why there is currently so much public opposition to Genetically Modified (GM) foods is because they could potentially pose a threat to public health and the environment.

The other beneficiaries are the users of the countryside, rural businesses and the wider population who appreciate the environment and all benefit from positive farm and countryside management. Contributing to its upkeep through general taxation is entirely appropriate. For this reason a continuing shift from Pillar One to Pillar Two support within the CAP remains essential. Despite the fanfare surrounding the CAP reform in the summer of 2003, this shift in funding is still not occurring fast enough.

A fairer return for farmers

Farmers have a claim to a larger share of consumer spending in the supermarket. The current squeeze on farm incomes partly reflects the relatively low price they receive for raw food materials relative to the eventual finished product. This is particularly evident with organic foods, where consumers are often prepared to pay more for organically grown foods because they are perceived to be healthier and more nutritious. This is not necessarily the case and in fact it is the environmental not the public health case for organic food production that is much stronger.

Nonetheless, retail prices for processed organic foods often are 50 per cent or more above their conventional equivalents. Yet, the proportion of the final value accounted for by the raw food materials may be extremely small. It is questionable whether the 'organic label' is reflecting genuinely higher costs or pushing up margins throughout the

food chain. On the other hand, large quantities of organic food are sold at virtually no premium at all including a significant proportion of current organic milk production in the UK. The relationship between the sustainability of the farm that produced the essential ingredients and the price of the final product is anything but simple.

Farmers are frequently in a weak negotiating position in the food chain, hence the importance of restraining the power of the supermarkets and supporting a new approach at farm level. This could include building co-operative or group initiatives for engaging more effectively in marketing, processing and identifying potential partners. For some the option of shortening the food chain and establishing closer contact with consumers through farmers' markets and other direct sales will be attractive because they cut out the supermarkets.

Central to the farmers' market idea is that the produce on sale must be from a locally defined area in close proximity to the market. Farmers' markets generally encourage environmentally friendly production processes and use minimal packaging. Farmers involved in local food schemes vary the crops and livestock they produce in response to consumer demand which, in turn, increases on-farm biodiversity. Marketing local produce to local people also reduces the distance food is transported. In many cases, farmers' markets also help to build and nurture local communities as well as strengthen social relationships between farmers and their customers (Friends of the Earth 2002). Co-operatives and farmers' markets could represent a small, but important share of the overall market. The community and environmental benefits they offer suggest they merit government support. They should not, however, be viewed as a substitute for the fairer pricing of food.

The longer term policy challenge

Providing long term subsidies to farmers purely on the basis of production levels is growing increasingly difficult to justify. Through its strategy for Sustainable Farming and Food this Government has already acknowledged the need to modernise the farming industry and provide greater support to farming practices that promote environmental protection and rural amenities. If the UK is to remain a leader in Europe over farming reform it will need to press ahead with its commitment to develop a national entry level agri-environment scheme open to all farmers.

The lack of new funding to help support this measure from the CAP budget was one of the disappointments of the June 2003 reforms. This leaves the Government with a clear goal: to seek a further round of CAP reform over the next three years so that a further transfer to Pillar Two can take place and the entry level scheme can be expanded to take in a larger proportion of farmers.

In the coming years, there will be little extra money for environmental policies, much less sustainable agriculture, as the Government has already pledged that health, education and child poverty will be its priority spending areas. If ministers fail to secure further CAP reform within Europe, there will be a big question mark over whether even more additional funding can come from national sources to deliver the Government's farming strategy and aspirations to modernise the farming industry.

The shift to more sustainable forms of agriculture is not only about changing farming practices and enhancing environmental protection; it is also about providing farmers with a 'fairer deal.' Achieving greater social justice throughout the food chain will require fairer returns for farmers and fair wages and conditions for those working on farms.

The Government has already taken some important steps to encourage farmers to move towards more sustainable farming and food production. Within Europe, Ministers will need to continue to show leadership if further CAP reforms are to be progressed. This political leadership will be critical to delivering longer-term support for agri-environment measures and sustaining a viable rural economy.

References

- DEFRA (2002a) *A New Strategy for Sustainable Farming and Food* Department for Environment, Food and Rural Affairs
- DEFRA (2002b) *Agriculture in the UK 2002* Department for Environment, Food and Rural Affairs
- DoH (2002) *Health Survey for England 2002* Department of Health
- EC (2003) *A Long Term Policy Perspective for Sustainable Agriculture* DG Agriculture, European Commission
- EC (2002) *EU Citizens Want Safe Food and a Healthy Environment from Farming Policy* European Commission Poll

82 Sustainable Development and Social Justice

Environment Agency (2002a) *Major Water Pollution Incidents in England and Wales in 2002*

Environment Agency (2002b) *Agriculture and Natural Resources: Benefits, costs and potential solutions*

Friends of the Earth (2002) *Local Food, Future Directions* Friends of the Earth

HM Treasury (2002) *Spending Review 2002-2004* HM Treasury

Policy Commission (2002) *Farming and Food: A sustainable future* Report of the Policy Commission on the Future of Farming and Food

Rural Europe Journal (2003) European Commission data on Second Pillar budget CAP subsidies *Rural Europe Journal* 7