

ESRC
Global
Environmental
Change
Programme

Environmental justice

Rights and means
to a healthy environment
for all

Special Briefing No 7

November 2001



**Friends of
the Earth**



Contents

Introduction

Opportunity & risk

- 1 Born in the USA
- 2 Environmental impacts: unequal and unfair?
- 3 Policy responses for environmental justice

Assessment

Participation
& capacity

Integration

- 4 Challenges ahead



Background

This briefing was developed from a joint seminar of Friends of the Earth and the London School of Hygiene & Tropical Medicine on Environment Justice held during the Healthy Planet Forum of the WHO Environment and Health Ministers Meeting in London, June 1999. The briefing pulls together the results of this seminar with academic research undertaken by the ESRC Global Environmental Change Programme.

The briefing was co-authored and edited by Carolyn Stephens, Simon Bullock and Alister Scott with key contributions from GECP and fellow NGOs and academics.

Carolyn Stephens

Senior Lecturer in Environment and Health Policy
Environmental Epidemiology Unit
Department of Public Health and Policy
London School of Hygiene & Tropical Medicine
Keppel Street
London WC1E 7HT
U.K.
tel: +44 (0)20 7927 2308
fax: +44 (0)20 7580 4524
Email: carolyn.stephens@lshtm.ac.uk
www.lshtm.ac.uk

Simon Bullock

Research Officer
Policy and Research Unit
Friends of the Earth
26-28 Underwood Street
London N1 7JQ
U.K.
tel: +44 (0)20 7566 1683
fax: +44 (0)20 7490 0881
Email: simonb@foe.co.uk
www.foe.co.uk

Alister Scott

SPRU (Science & Technology Policy Research)
University of Sussex
Mantell Building, Falmer
Brighton BN1 9RF
U.K.
tel: +44 (0)1273 678986
fax: +44 (0)1273 685865
Email: A.H.Scott@sussex.ac.uk

Cover photo: Artisan tank-makers risking occupational disorders building water tanks for wealthier citizens by Achinto, Kolkata, India.

Introduction

There is growing evidence of the links between environmental problems and social injustices. Environmental justice is the idea that brings both together. It researches the extent of linkages between environmental and social injustice, and asks whether it is possible to tackle both social exclusion and environmental problems through integrated policies and developments.

At the same time, there is an emerging toolkit for governments, individuals and communities to use to implement environmental justice. New assessment techniques, policies, and laws now allow the more transparent establishment of rights and responsibilities, and this in turn brings new legal, reputational and financial risks for those acting in an irresponsible way.

This briefing brings together the evidence on environmental justice in the UK, and is the first attempt to provide a synthesis of the various factors involved. It is based on evidence collected by researchers in the ESRC's Global Environmental Change Programme (GECF) and by civic groups and academics working on poverty, environmental protection and development.

The briefing suggests that by seeing social justice issues through an environmental lens, and vice versa by analysing environmental issues more clearly in terms of social justice, new and more effective ways for dealing with each can be developed than if, as is usually the case at present, each is dealt with separately. The insight that, for example, more children are killed in road accidents in poor communities than in richer ones provides new support for infrastructure investments to change risks in disadvantaged communities such as, for example, reducing speed of drive-through vehicles. Reducing traffic speed in communities will often in turn help the achievement of other social and environmental goals such as providing safe play areas and reducing emissions and their negative health effects.

Environmental justice is not a panacea for all social injustices. Environmental and social goals can be in conflict. In 1994 the imposition of VAT on fuel - an ostensibly environmental measure - created outrage because of the hardship it would cause, particularly to elderly people. Environmental policies pursued in isolation can damage progress towards social goals, and vice versa. Although integrated policy packages can be designed to avoid conflict - and even meet both aims simultaneously - this does not yet happen often.

But overall, Environmental Justice offers a fresh perspective. Environmental Justice's two basic premises are first, that everyone should have the right and be able to live in a healthy environment, with access to enough environmental resources for a healthy life, and second, that it is predominantly the poorest and least powerful people who are missing these conditions. Taking these two premises together suggests that a priority is to ensure that the adverse conditions faced by the least powerful people are tackled first. As well as implying environmental rights, it implies environmental responsibilities. These responsibilities are on this current generation to ensure a healthy environment exists for future generations, and on countries, organisations and individuals in this generation to ensure that development does not create environmental problems or distribute environmental resources in ways which damage other people's health.

This is a view which reframes environmental issues as a critical and core element of achieving social justice goals, rather than as a set of priorities which conflict with social goals. If social justice can be thought of as ensuring that all people have at least a basic set of minimum conditions to achieve a healthy life, then having a healthy, safe environment and access to enough environmental resources for all people is a central part of this social justice goal. Environmental justice is concerned with ensuring the environmental part of this social justice goal.

everyone should have the right and be able to live in a healthy environment, with access to enough environmental resources for a healthy life...

it is predominantly the poorest and least powerful people who are missing these conditions



Opportunity and risk

People suffering from environmental harm will be more able to seek redress and defend themselves in future.

The reframing using environmental justice offers the opportunity for Government to merge two difficult agendas at two levels. At a national level, conflicts between environmental and social goals as currently pursued can start to be resolved by a focus on tackling environmental problems as part of the social exclusion agenda. Initially, this will have direct benefits for social inclusion - as the most socially excluded people have the worst environmental conditions - and in the medium term this merged policy focus will allow more integrated policy making at all levels, further minimising conflicts between goals. At an international level, a focus on a fair environmental deal for the poorest people in the poorest countries is a key part of tackling endemic and deeply intractable global poverty problems. This is because global environmental problems, and lack of access to scarce environmental resources, tend to affect the poorest and most vulnerable people hardest.

But environmental justice is also a warning to Governments, organisations and individuals who are currently benefiting from environmental injustices, on two counts:

- First, as this document shows, led from Europe, a strong environmental rights agenda based in law is building up, and this is likely to be accompanied by an increased ability to prove environmental causation and an increased use of the law to defend people's rights to a healthy environment. People suffering from environmental harm will be more able to seek redress and defend themselves in future.
- Second, distribution will become a more and more prominent issue as more resources - from road space to the global atmosphere - become scarcer. Governments and companies which act early to change policies and practices to reduce environmental injustices, and look ahead to meet the challenges of how to distribute scarce environmental resources, will be much better placed than those that react later.

Outline of the document

Although this document aims to provide an initial synthesis of the evidence on environmental justice, and some ideas for the way forward, its aim is to provoke thought and debate rather than to be comprehensive.

The briefing is set out as follows:

- Section One sets out how the environmental justice agenda has evolved and how it links with current UK government policy on sustainable development. It points to the origin of the environmental justice idea in the US, but highlights the limits of the US approach and gives a brief introduction to relevant debates in the UK to date.
- Section Two outlines the extent of environmental injustices in and caused by the UK. It reviews evidence that points strongly to links between poverty and pollution, inequality of access to environmental resources, and health inequalities, and discusses the international and inter-generational dimensions of these.
- Section Three sets out some of the key policy and research areas where changes can be made.

environmental justice
is a global and inter-
generational issue as
well as a national
one, in many if not
all countries

The concept of 'environmental justice', as it is currently understood, is largely the product of the activities of a network of community groups in the USA. These groups have resisted the siting of polluting factories and waste sites in predominantly black neighbourhoods and indigenous people's reservations. This movement - which has taken a civil rights and social justice approach to 'environmental' problems - has been aided by a substantial US academic literature which has documented the extent and causes of environmental injustices (see for example www.ejrc.cau.edu, Hofrichter 1993, Bryant 1995 and Edwards et al. 1996 for introductions to US developments).

In 1994 the issue reached the White House when President Clinton issued Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This order reinforces the thirty year old Civil Rights Act of 1964 by requiring federal regulatory agencies to 'make environmental justice a part of all they do'.

Beyond the US approach

Activists and academics in the US have led the way in developing the environmental justice approach. This has generated valuable insights and provided an effective basis for informed activism. However, despite a recent move towards tackling 'transportation equity' the USA's focus has mostly been on tackling pollution from landfills and industrial sites. But, as shown by GECP research, this focus does not cover a number of other important aspects of environmental justice (Williams 1998, Boyle and Anderson 1996).

First, it has not so far elaborated formal definitions of the victims of environmental injustices. This means, for example, that it remains unclear how to accord victim status in law when, for example, the victim cannot speak for themselves, such as an unborn child or a person whose intellectual abilities have been severely damaged by the harm they have suffered, such as radiation.

Second, it has tended to emphasise cases of injustice in localised geographical areas: this fails to account for injustices over larger areas and across the social spectrum - such as the effects of the Chernobyl accident, or from the unpredictable impacts of chemicals in the environment. For example the Inuit people's staple diet of fish contains high levels of polychlorinated biphenyl, by-products of industrial processes far from their country, concentrated gradually through the food chain (Sandeu et al. 2000). There are many other examples of environmental injustices where some people get economic and other benefits of a development or industrial process, while large majorities suffer consequent social and environmental disbenefits.

Third, environmental justice is a global and inter-generational issue as well as a national one, in many if not all countries. For example, people in African countries and future generations are likely to be badly affected by climatic changes caused by fossil fuel burning, which has been caused predominantly by people in non-African countries, in this and previous generations (Boyle and Anderson 1996).

Fourth, some would also argue that the human race, with its growing dominance of natural systems and as the agent of high rates of extinctions of plants, animals and habitats (UNEP 2000), should also take responsibility for ensuring the continued existence of the planet's biodiversity. As Dobson has pointed out, 'no theory of justice can henceforth be regarded as complete if it does not take into account the possibility of extending the community of justice beyond the realm of present generation human beings' (Dobson 1998:244-245). There is now a well-respected body of thought that accords rights to justice to the natural world, a fact which complicates the environmental justice framework and reinforces the need to analyse the consequences of policies and developments.

So environmental justice is not just an issue about race or inequality, nor are the problems restricted to the USA.

Bringing environment, social and health goals together

Based on his research within the Global Environmental Change Programme, Andrew Dobson has argued that it is mistaken to assume that more social justice will necessarily bring greater environmental sustainability, and vice versa. His analysis (see box 1) of the features of both environmental sustainability and social justice, and the intersections between the various definitions of these concepts, has shown that it is at the intergenerational level that environmental goals and social justice goals are closest - as social justice to future generations requires leaving them a healthy environment to live in.

Box 1 Justice and sustainability: can they coincide?

Dobson describes three conceptions of environmental sustainability and compares these with the elements of social justice. The conceptions of sustainability that he uses are critical natural capital, irreversible nature, and natural value. The dimensions of social justice, briefly, include: the community of justice; the structure of the relationships; the question of what is to be distributed; and the principle of distribution. As Dobson explains: 'any theory of social justice must contain a view on who or what the relevant benefits and burdens are to be divided among and between' (Dobson 1998:61).

Dobson finds that the two concepts are related in three distinctive possible ways: the environment as something to be distributed; justice as functional for sustainability (necessary for its achievement); and 'justice to the environment'. The analysis shows that neither sustainability nor social justice have definitive meanings, so 'this opens the way to legitimising the pursuit of either of them, in terms of the other, in a number of ways'. It also suggests that 'policies for justice and sustainability will not always pull in the same direction' (p.242), but that liberal theories of justice are broadly compatible with the most common conception of environmental sustainability. Dobson concludes that compatibility between sustainability and justice is not automatic. It will therefore need to be both researched and analysed in much greater detail, and deliberately pursued (in terms of, for example, government policy) rather than assumed.

An environmental justice frame enables a similar argument to be made at an intra-generational level - for example in the context of climate change, it can be argued that social justice to other countries requires that individual countries do not use up more than a fair share of the global atmosphere's sustainable capacity to absorb carbon dioxide.

Indeed, environmental justice finds strong resonance with the social elements of the UK Government's definition of sustainable development. The UK Sustainable Development Strategy 'A better quality of life for everyone' has as a main objective 'Social progress which meets the needs of everyone'. It states 'Everyone should share in the benefits of increased prosperity and a clean and safe environment. We have to improve access to services, tackle social exclusion, and reduce the harm to health caused by poverty, poor housing, unemployment and pollution. Our needs must not be met by treating others, including future generations and people elsewhere in the world, unfairly'. This focus on the need for all people to have a healthy environment is directly compatible with the aims of Environmental Justice. The latter's focus on ensuring a healthy environment for all, and on tackling the worst problems first, is a direct social justice goal, mirroring the objectives of the UK sustainable development strategy.

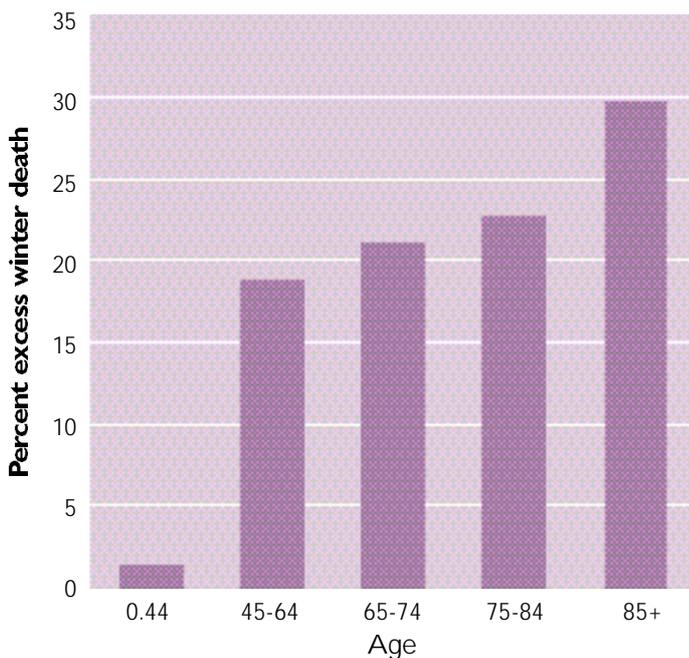
'Everyone should share in the benefits of increased prosperity and a clean and safe environment. We have to improve access to services, tackle social exclusion, and reduce the harm to health caused by poverty, poor housing, unemployment and pollution. Our needs must not be met by treating others, including future generations and people elsewhere in the world, unfairly'. UK Sustainable Development Strategy

Since the strategy, there has been progress integrating the economic and environmental goals - through concepts such as 'Factor 10' efficiency and the ecological tax reform agenda. There has also been progress on integrating the economic and social goals - with a far-reaching programme on social exclusion and neighbourhood renewal. But there has been much less on integrating the environmental with the social - this is where an environmental justice focus can help.

Environmental Justice can be thought of as a way to start to implement the environmental-social part of this contract. What is needed is a clear strategy and the requisite political and bureaucratic energy for achieving environmental justice. The task now is to elaborate this strategy and specific ways forward for government, the business community and civic groups. That is where this document hopes to make its contribution.

'Environmental problems are serious and impact most heavily on the most vulnerable members of society: the old, the very young and the poor.'

Michael Meacher, UK Minister for the Environment
Foreword to Boardman et al. 1999.



Excess UK winter deaths hit the elderly more
From Wilkinson et al 2001.

There are some nascent signs of political life in the UK debate about environmental justice. Here is a selection:

'We should never lose sight of the fact that it is the poor who suffer most from pollution', John Prescott, UK Deputy Prime Minister, February 2000 speech to the Fabian Society

'Environmental problems are serious and impact most heavily on the most vulnerable members of society: the old, the very young and the poor', Michael Meacher, UK Minister for the Environment, Foreword to Boardman et al. 1999

Charles Kennedy: 'we are committed to justice internationally on climate change, committed to justice for our poorer communities - providing decent houses that are energy efficient and warm, and committed to justice by providing decent public transport...' Leader of the Liberal Democrat Party, Green Justice speech, March 2001.

'A small number of people tend to pay most of the price for production in terms of pollution. It is true that access to environmental benefits depends substantially on income'. Sir John Harman, Chairman of the Environment Agency, September 2000.

Box 2
Nascent signs of political life

Environmental impacts: unequal & unfair

Factory pollution and deprivation: factory emissions against deprivation - carcinogen emissions in local wards, 1= most deprived of 10% of wards. From FOE 2001

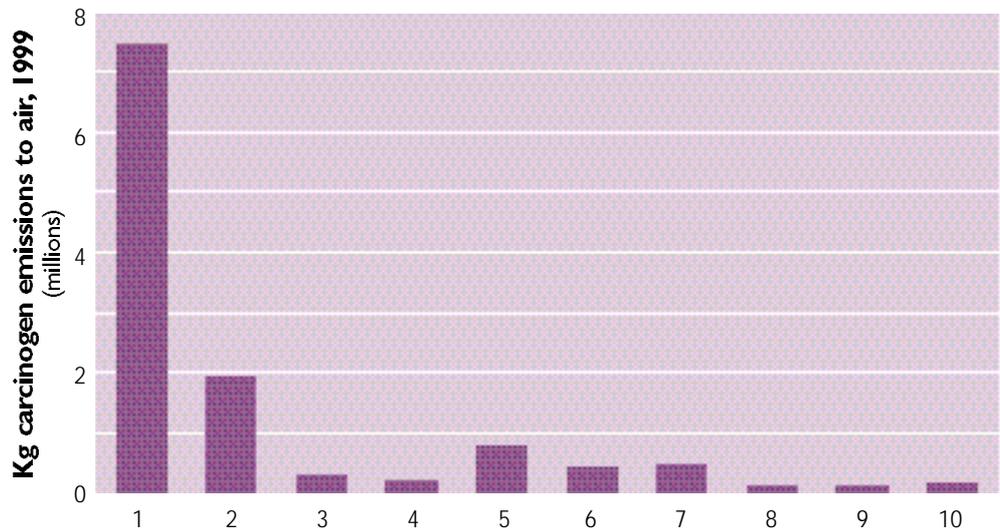
So what is the evidence for the existence of environmental injustice? This section provides a brief look at some of the evidence for these kinds of problems, intending to be illustrative rather than comprehensive. Several key lessons have emerged from research so far:

In the UK

1. Environmental impacts are unevenly distributed.
2. Access to environmental resources is often similarly uneven.

And also

3. Environmental justice has strong international dimensions.
4. Justice also forces a focus on the needs and interests of future generations.



Environmental impacts: Poverty and pollution

In the UK, evidence strongly suggests that the distribution of environmental impacts and resources is income-related. Generally, poorer people live in worse environments. These environmental injustices are the first part of what one former GECP researcher has called 'environmental exclusion' (Jacobs 1999).

A recent Friends of the Earth study correlated the Environment Agency's factory emissions data with the Government's 'Index of Multiple Deprivation'. It found that of 11,400 tonnes of carcinogenic chemicals emitted to the air from large factories in England in 1999, 82 per cent were from factories located in the most deprived 20 per cent of local authority wards (FoE 2001).

There are also ethnic inequalities. In one of the first studies in the UK to look at the links between ethnicity and environmental risk exposure, researchers at the University of Staffordshire looked at the social characteristics of wards containing 'hazardous substances consent sites' (Walker, Fairburn and Bickerstaff 2000). They found a statistically significant bias towards sites being located in wards with a higher proportion of ethnic minority population. The Cabinet Office's Social Exclusion Unit reports that 70 per cent of all people from ethnic minorities live in the 88 most deprived local authority districts (Social Exclusion Unit, 2001). As deprivation is associated with worse environmental conditions, it is likely that this indicates disproportionately large impacts on ethnic communities. The extent to which such effects are the result of a general association between ethnicity and poverty, or the outcome of specific siting processes and the operation of the housing market, is as yet unclear.

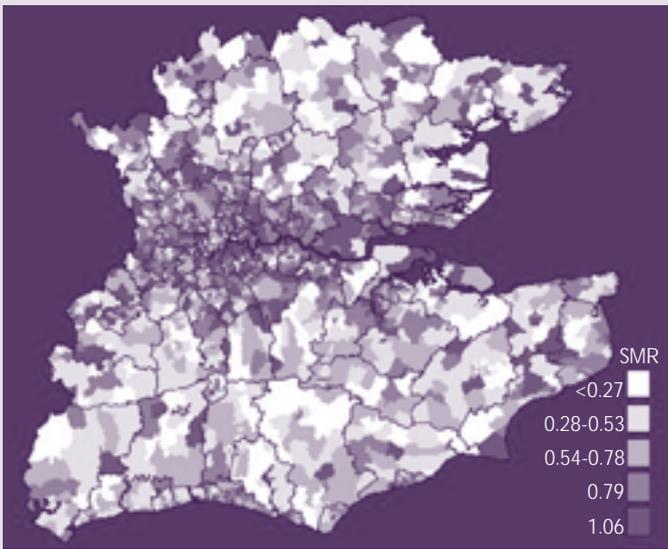
- ⊙ Factories
- local authority boundaries
- Average household income
- £0-£14,999
- £15,000-£19,999
- £20,000-£24,999
- £25,000+



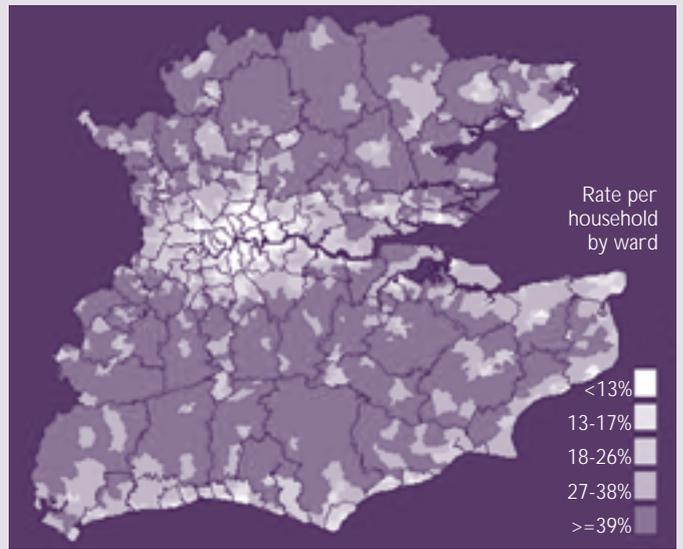
FACTORY WATCH

Polluting factories concentrated in low income areas around Merseyside
Distribution of factories according to average income by postcode sector. From FOE 2001.

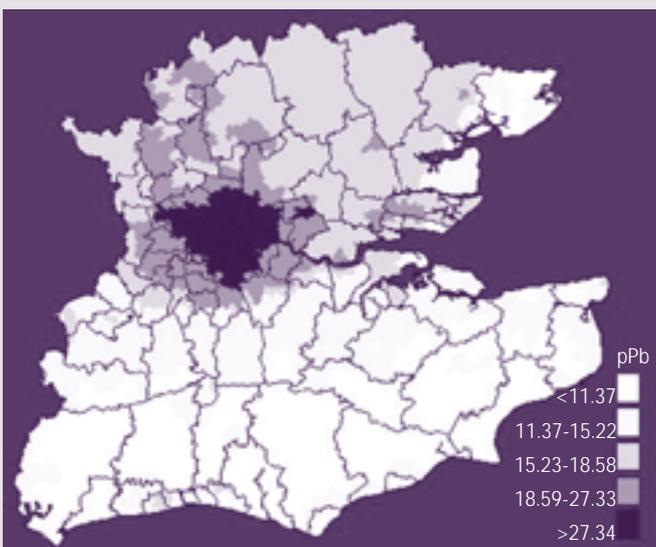
Environmental health impacts are also unequally distributed. Respiratory problems in London have been found to concentrate in the poorest areas and correlate with high traffic levels (Stevenson, 1999). The responsibility for the cause of problems is also unequal - car ownership was lower in areas with worse traffic levels. The Government's inquiry into 'Inequalities in Health' notes that 'The burden of air pollution tends to fall on people experiencing disadvantage, who do not enjoy the benefits of the private motorised transport which causes the pollution': it is easily forgotten by policy-makers that 30 per cent of households do not have access to a car (Acheson Report 1998). Transport-related injuries also affect poorer people disproportionately. Children from Social Class V are five times more likely to be knocked down than children in Social Class I (Roberts and Power 1996). Recent research by the DETR also shows that Asian children are more likely than white children to be injured in road accidents (DETR 2001a).



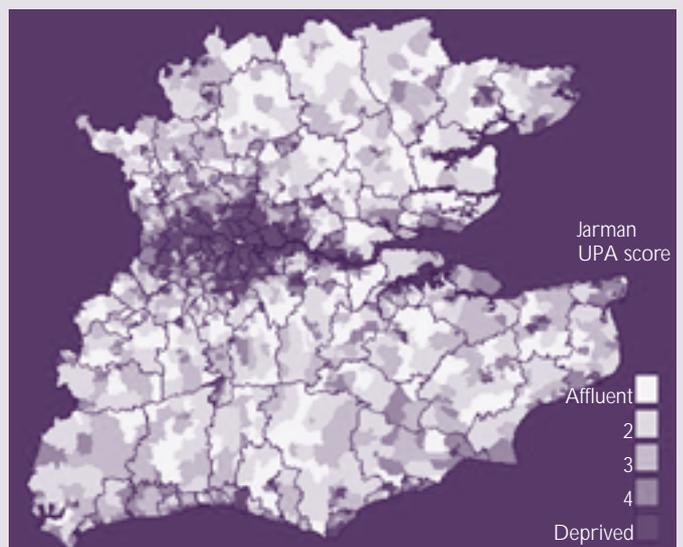
Where are people dying?
SMR for respiratory disease Ed-Line & Crown copyright



Where the cars? Proportion of households with 2 or more cars. Ed-Line & Crown copyright



Where is the pollution? NO₂ concentrations. Ed-Line & Crown copyright



Where is the poverty? Deprivation. Ed-Line & Crown copyright

there is a problem of 'food poverty' in the UK, where 20 per cent of the population cannot afford healthy food, especially where fuel and rent take priority

Access to environmental resources: cold and hungry

People need access to environmental resources to meet their needs:

- physical needs:shelter, heat, food,clean air and water
- economic needs:transport infrastructure, shops, work
- and aesthetic, mental and spiritual needs:green space, quiet,access to countryside.

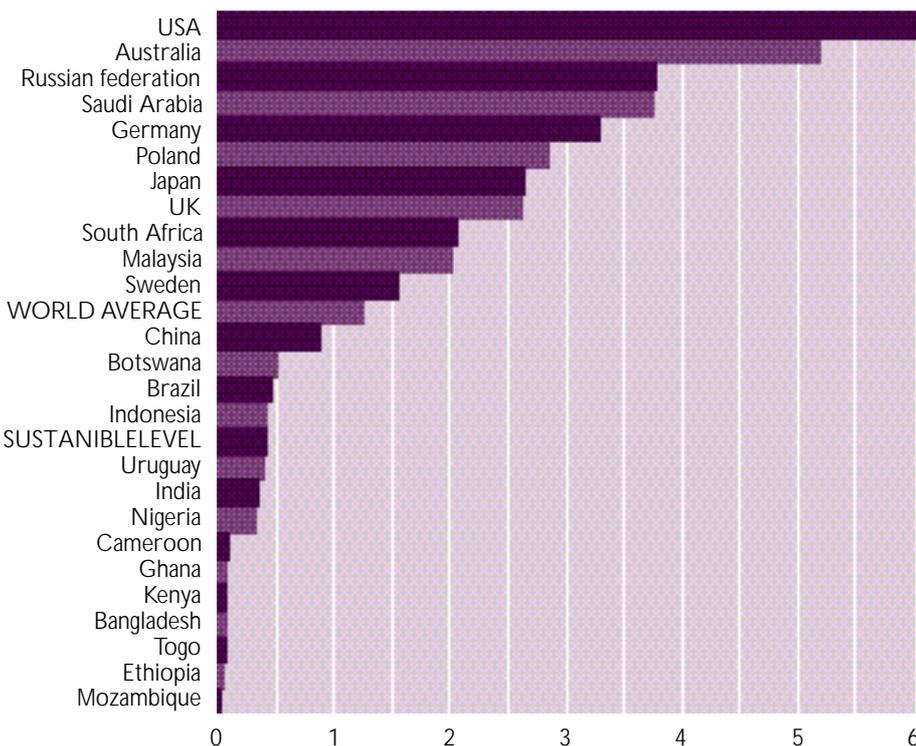
Research shows that access to environmental resources is very uneven:this is the second dimension of 'environmental exclusion'. Environmental justice provides a new way of viewing access to resources,including resources not traditionally associated with 'environmental' thinking, such as the built environment.

For example, the Government estimates that there are 4½ million UK households living in fuel poverty - the lack of affordable warmth (DETR 2001b). By other definitions,this figure is much higher. Millions of homes are energy inefficient and have poor heating systems, and their occupants cannot afford to make improvements or keep their homes warm (DoE 1996). Damp and cold homes increase the likelihood of lung and heart illnesses. Fuel poverty is linked to higher rates of winter mortality, and there are an average of over 30,000 unnecessary extra winter deaths each year (National Statistics,2000).

Similarly, there is a problem of 'food poverty' in the UK,where 20 per cent of the population cannot afford healthy food,especially where fuel and rent take priority. This situation is exacerbated by lack of access to shops selling healthy food. Again,it tends to be poorer areas which are further from shops selling fresh fruit and vegetables,and governmental analysis shows that this is partly because of the growth of out-of-town superstores which has caused many inner-city food stores to close (DETR 1998). People in poorer communities are less likely to have transport options to enable them to access more distant shops.

These problems do not only affect the urban poor, however. As research by the Council for the Protection for Rural England has shown, the number of 'tranquil areas' in the countryside has diminished rapidly in the past decades,mostly as a result of traffic growth. In this case, people's demand for mobility is reducing others' access to an environmental resource - leisure and tranquillity - with no recompense and little policy attention (CPRE 1999).

Per capita carbon emissions 2000 (tonnes) From FOE 2000.



International injustices - a growing export

Countries can also impose environmental injustices on people in other countries. This happens in two main ways - damaging other people's environments,and overuse of scarce global commons.

The UK consumes large quantities of raw environmental resources - metals, wood,oil and minerals - which are mostly imported. A report for the World Economic Forum highlighted that the UK's 'ecological footprint' - the total amount of land a country is appropriating in order to support its economy is equivalent to an area over ten times the size of the UK,the 8th worst out of 122 countries surveyed. The UK has a net deficit of 4.5 hectares per person (World Economic Forum 2001).

This can cause environmental problems in other countries. For example another GECF project found that mining has produced some high profile examples of water contamination and forest degradation in Papua New Guinea and Irian Jaya (Warhurst 2000). Economists have introduced terms such as 'race to the bottom', the 'pollution haven hypothesis' and 'regulatory chill' to describe situations where poor countries might deliberately weaken their environmental policies in order to attract industry. Some former GECF researchers have started to find evidence of such effects (Mabey and McNally 1999), although overall the evidence as to whether these effects are happening is as yet unclear and mixed, partly due to lack of data and insufficient research (Jenkins 2000). Nevertheless, such research concludes that industrial production in regions such as Latin America 'is a long way from being sustainable' (Jenkins 2000).

Large ecological footprints are also an example of the UK's over-consumption of limited global resources. There is a scientific consensus from the Intergovernmental Panel on Climate Change that fossil fuel burning is causing a discernible impact on the Earth's climate, through build-up of carbon dioxide and other greenhouse gases in the atmosphere, and that carbon dioxide emissions will need to be reduced, globally, to prevent dangerous levels of climate change. In effect, the atmosphere is both a global, limited resource and an over-used "sink" for pollution. Distribution of access to this sink is a major political issue - and countries such as the UK are getting a disproportionately large share of the use, and therefore advantage, for use of this sink. The UK currently emits 2.6 tonnes of carbon per person per year, compared with a global average of 1.2 tonnes per person, and figures of 0.01 tonnes for Mozambique, 0.85 for China, and 6.0 for the USA.

In response to this inequality between countries, across a broader range of environmental resources, the global Friends of the Earth network has advocated the idea of 'Environmental Space' - the equal distribution of resource consumption between countries on a per capita basis. Under this framework the current generation would only use a sustainable amount of environmental resources and services (ensuring intergenerational justice); and access to these thus limited environmental resources would be on a fair basis between countries (Carley and Spapens 1998).

A further argument is that not only do industrialised countries currently take far more than a 'fair share', but that they are historically responsible for a wide range of over-use of environmental resources. This has been called the 'ecological debt.' (See box 3)

A further argument is that not only do industrialised countries currently take far more than a 'fair share', but that they are historically responsible for a wide range of over-use of environmental resources. This has been called 'ecological debt.'

Poor countries have recently started to adopt a position that rich countries have accrued a large 'ecological debt' to the South, for over-appropriation of local and global resources over the past few centuries (Accion Ecologica 1999 and Martinez-Alier 1998). Some claim that this debt is larger than the 'external debt' - the financial debt which poor countries are currently servicing.

Box 3
Ecological &
social debt

Developed mainly in South America, ecological debt includes ideas such as:

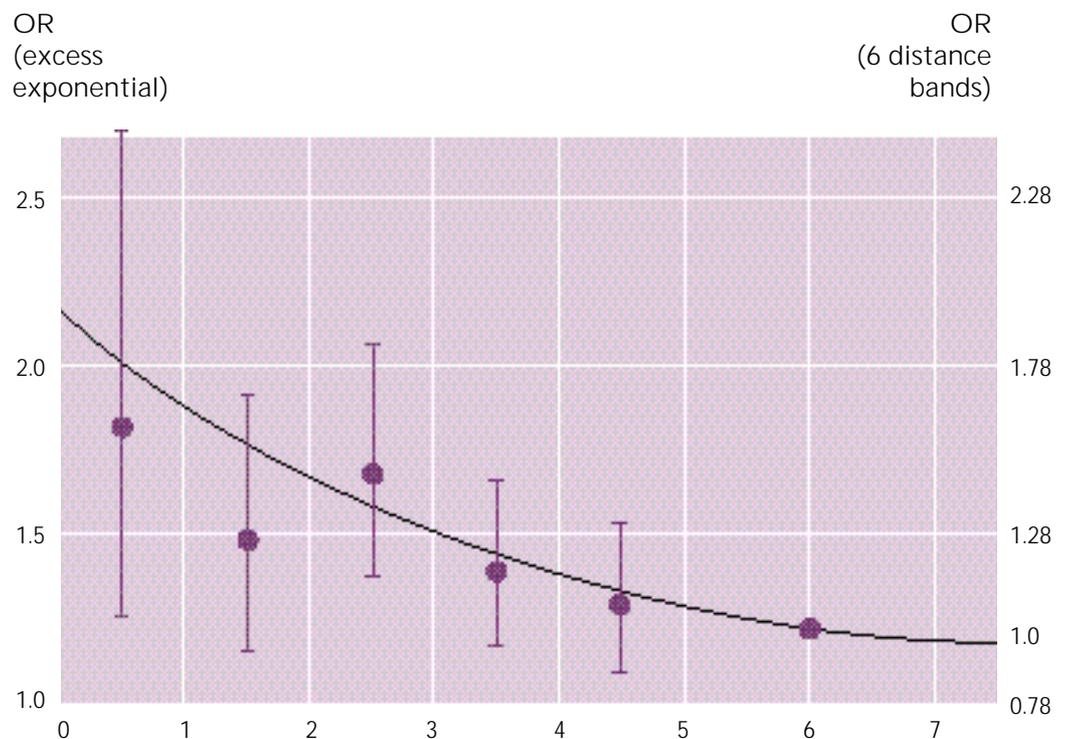
- resource extraction during colonial periods.
- export of natural resources under unequal terms of trade, which do not take into account the social and environmental damage caused by their extraction
- the historic and current intellectual appropriation of ancestral knowledge
- the use of water, air, the best land, and human energy to establish export crops, putting at risk the food, health and security of local and national communities.
- damage to the ozone layer and the appropriation of the carbon absorption capacity of the planet
- the export of toxic wastes and nuclear testing.

A financial estimate of the size of the "carbon debt" - a small part of the total ecological debt - has been put at \$1500 billion (FOE, 2000). This is based on industrialised countries' historical contribution to the build-up of carbon dioxide in the atmosphere.

Inter-generational injustices

Environmental justice's first principle is that everyone should have a healthy environment, so this requires a focus on the needs of future generations. Even if everyone today lived in a healthy environment, environmental justice would not be done if this were achieved at the expense of people in future generations. Types of actions contributing to injustices across generations include:

- activities that impose costs on future generations without any balancing of benefits: nuclear waste will have to be managed for thousands of years; toxic waste that impacts on health of future generations.
- reducing the ability of the environment to provide non-substitutable resources and services (what environmental economists call 'critical natural capital' (Pearce et al 1990)
- creating on-going negative environmental impacts: on current trends, climate change is predicted to become more severe in its disruptive effects over the coming centuries
- using technologies with unknown and unexplored potential long-term effects: as pointed out by the European Environment Agency, the uncontrolled use of persistent artificial chemicals in the environment 'is an enormous and probably irreversible gamble with the health of children and future generations' (EEA,1999).



the uncontrolled use of persistent artificial chemicals in the environment 'is an enormous and probably irreversible gamble with the health of children and future generations'

EEA,1999

Risk of congenital malformation with distance of residence from hazardous waste landfill sites.

From: Dolk H, et al. (1998).

Odds ratios of congenital malformations increase with proximity of toxic landfill sites.

Policy responses for environmental justice

Research indicates that the procedures and processes needed to tackle negative environmental impacts are neither fully developed nor accessible on an equal basis to different social groups.

Environmental justice encompasses the substantive right of all to a healthy environment.

There are a number of causes of environmental injustices, such as:

- a failure of governments and the law to protect people across society from harm
- a tendency of certain parts of the private sector to seek to maximise profits by externalising costs, with implications for people and the environment
- a lack of explicit discussion of the distributional impacts of policies and actions
- inadequacies in the tools and procedures for implementing environmental justice, and
- inequalities in access to these tools and procedures.

Research indicates that the procedures and processes needed to tackle negative environmental impacts are neither fully developed nor accessible on an equal basis to different social groups. Many environmental injustices may be caused or exacerbated by procedural injustices in the processes of policy design, land-use planning, science and law.

Ensuring environmental justice requires policies and actions which treat people equitably, and policies and actions to address current and historical injustices. Environmental justice also cuts across many policy areas: health, transport, housing, employment, waste, and policies for many social groups.

In this rich context, research shows that to achieve environmental justice, there are four broad areas where changes in policy and practice are needed:

1. Rights and responsibilities: ensuring a right to a healthy environment is an overarching aim of policy, which must be supported by placing responsibilities on individuals and organisations to ensure this right is achieved.
2. Assessment: projects and policies need to be assessed for their distributional impacts.
3. Participation and capacity: decision-making should involve those affected, and those groups or individuals enduring environmental injustices need support in order to increase their control over decisions which affect them.
4. Integration: of social and environmental policy aims.

Rights and responsibilities - national

This section looks at the growing body of law concerning environmental rights, the likely increase in use of law, and the responses that may be needed to cope with these changes.

As a concept, environmental justice encompasses the substantive right of all to a healthy environment. The substantive right to a healthy environment for all people is written in various forms into many national documents. For example, Douglas-Scott points out that the Spanish constitution contains a right to enjoy an 'environment suitable for the development of the person', and the Portuguese constitution states 'everyone shall have the right to a healthy and ecologically balanced human environment and the duty to protect it' (Douglas-Scott 1996). There are also international codes - The United Nations Commission on Human Rights has set out draft principles on human rights and the environment, such as "All persons have the right to a secure, healthy and ecologically sound environment", and enabling rights (UN 1994).

Naturally, in order for these rights to be deliverable, responsibilities also have to be assigned to individuals and organisations. There is now a large body of law on 'enabling' rights coming from Europe which directly affects the UK, through the Aarhus Convention and the Human Rights Act (Agyeman 2000) (see boxes). The UK Human Rights Act 1998 brings into UK domestic law the 'rights and freedoms guaranteed under the European Convention on Human Rights' (ECHR). So far as is possible, UK legislation must be compatible with the rights set out in the Convention.

Box 4 The Human Rights Act

Every person has the right to live in an environment adequate to his or her health and well-being...

The Human Rights Act provides a foundation of fundamental civil and political rights, which could be used to challenge cases of environmental injustice. Four of the Act's articles appear most relevant:

Right to Life (article 2)

Article 2 provides that everyone has a right to life protected by law. It creates a prohibition against the state to intentionally deprive an individual of life, intentionally or negligently.

Right to a Fair Trial (article 6)

This is likely to be used in the near future to challenge UK planning law, which does not provide for the right of appeal by third parties to challenge planning applications.

Right to respect for private and family life (article 8)

This was used successfully in *Lopez-Ostra v Spain*¹, where a local planning authority had allowed local tannery factories to build an effluent plant close to Ms Lopez-Ostra's home. The European Court of Human Rights held that the authority had not struck a fair balance between the economic well being of the town and the rights of the applicant to enjoy her private and family life.

The Prohibition of Discrimination (article 14)

The prohibition of discrimination under Article 14, is particularly important in challenging cases where acts or omissions of the state allow, for example, the deliberate building of a road in a predominantly black or poor residential area rather than a white or rich residential area.

Box 5 Enabling rights: the Århus Convention

The Århus Convention of 1998 - to which the UK Government is a signatory - grants the public rights and imposes on Governments and public authorities obligations regarding access to information and public participation and access to justice. It recognises 'substantive' environmental rights: '... every person has the right to live in an environment adequate to his or her health and well-being...' but its main pillars are three 'enabling' rights:

- The right to know - rights to environmental information
- The right to participate in decision making processes - the right to be consulted and participate in proposals, plans or activities
- The right to access to justice - a guaranteed right to the enforcement of the above rights via access to courts or other independent bodies

The convention also provides that national legislation not in line with the Convention will need to be changed before a country can ratify it. For the UK ratification will mean having to review the Freedom of Information Act and, as a member of the European Union, the Directive on Freedom of Access to Environmental Information².

Implications

¹ European Court of Human Rights (1994), Case 41/1993, Judgment of 9 Dec. 1994; Ser. A No. 303C

² Council Directive 90/313 on the Freedom of Access to Information on the Environment (OJ L158, 23 June 1990)

The Human Rights Act and the Århus Convention have the potential, if carefully harnessed, to enhance the affinity between respect for human rights and environmental protection. As scientific knowledge and information becomes more open and accessible, it is likely that these new legal rights will be used more often. The new laws allow human rights to be perceived as an integral facet of social justice and environmental protection, because 'acts leading to environmental degradation may constitute an immediate violation of internationally recognised human rights' (Anderson M, 1996). This clearly has implications for the actions of individuals and the private sector as well as the public sector.

Arguably, these human rights provide a multi-faceted definition of environmental rights and justice. However, using human rights to protect environmental rights is still difficult for two main reasons. Firstly, they do not relate directly to the environment and are imprecise. The ECHR for example does not provide an express environmental right. A right to a healthy environment is also subjective. Secondly, using human rights to provide assistance in environmental equity depends upon a judiciary familiar with environmental and human rights law as well as experience of the issues raised when dealing with environmental rights.

The establishment of an environmental court could guarantee a judiciary that understood environmental law and issues of environmental equity, and has recently been proposed by Lord Woolf, the Lord Chief Justice (Woolf, 2001). This could have real benefits for achieving environmental justice in the UK. But the mere establishment of such a court as a new institution in itself is not enough. To ensure it is effective, funding for environmental cases would need to be improved.

“When you say that it (incineration) is acceptable, it is acceptable to the more articulate sections of the population. From what you have said, the incinerator ends up in the less articulate sections of society. I do think we ought to make that quite clear.”

Lord Judd, in (Ryder, 1999).

Box 6
Procedural
injustices leading
to substantive
environmental
injustice

There are also other difficulties. The report by the Lord Chief Justice (Lord Woolf) on access to justice concluded that the legal system is often inaccessible because it is complex, time-consuming and expensive (Woolf 1995). Environmental law is no different. It is often highly specialised, and developing a legal case to the stage where it stands a chance of winning is often slow and costly, causing difficulties for those who attempt to use the law to obtain redress. Recent developments may not help here. For example, the Access to Justice Act 1998 included the expansion of 'no win, no fee' agreements, and reduced the number of people eligible for state assistance from the Community Legal Service. This has led to concern among lawyers and community groups that the Act makes it more rather than less difficult to receive assistance for environmental cases, and lawyers are less likely to take on environmental cases where an unfamiliar judiciary may reduce the likelihood of cases succeeding.

These problems will need to be addressed to ensure that people are able to access the law to protect their rights.

the legal system is
often inaccessible
because it is complex,
time-consuming and
expensive

Rights and Responsibilities: International

At an international level too, it is likely that the law will be increasingly available as an option to tackle environmental injustices (see box 7).

Box 7

The globalising arm of the law

resolution of global environmental problems such as climate change requires the co-operation of all countries

Legal redress is globalising. The International Criminal Court, and war crimes tribunals, are familiar examples of the use of international law to pursue certain criminal acts. The future of environmental justice may “globalise” too with the increased use of these and other precedents, not necessarily environmental.

- The US Alien Tort Claims Act (1789) allows anyone to sue for acts committed outside the US, by anyone, ‘in violation of the law of nations or a treaty of the United States’. A case is proceeding on behalf of the relatives of Ken Saro-Wiwa, against Shell-Nigeria. Any multinational corporation with a listing on the US stock exchange could find itself caught by the same Act.
- In December 2000, two French families of victims of BSE/CJD (‘Mad cow disease’) started a unique legal action for manslaughter and poisoning against two former British Conservative governments. Research within the ESRC Global Environmental Change programme proposed that poisoning laws could address food and environmental harm (Williams 1997).
- Austrian environmentalists are bringing a case against the Czech government in the US courts, concerning the Temelin nuclear power station which is close to the Austrian border, and involves US company Westinghouse. California’s courts have been used for cases brought by Burmese villagers and against Unocal and Total for allegedly condoning forced labour. Ecuadorean people are trying to bring Texaco to trial in the US for abuse of human rights in the alleged contamination of their land (Stephens et al 2001).
- The UN International Law Commission is currently working on ‘international liability for transboundary damage from hazardous activities’.

These precedents propose that soon any person in any place may be accountable for environmental harm, anywhere. We are, at least potentially, in a new era of global accountability.

This and other issues - such as distribution of global resources - mean that governments will need to take more account of international environmental justice issues. For example, resolution of global environmental problems such as climate change requires the co-operation of all countries, so competing claims for scarce global resources will need to be taken seriously.

The Royal Commission on Environmental Pollution, in its 22nd report ‘Energy - The Changing Climate’ recognised that global agreements on reducing emissions are more likely to be agreed and effectively implemented if they ‘allocate emission rights to nations on a per capita basis - enshrining the idea that every human is entitled to release into the atmosphere the same quantity of greenhouse gases’ (summary, para.7).

This allocation implies the need to move towards a more just distribution of greenhouse gas emissions, leading to the idea of ‘contraction and convergence’. This is the idea that high emissions countries will need to reduce their per capita emissions drastically, while poor, low emissions countries will have some room to increase theirs to allow poverty-alleviating developments. Recently, some authors have argued that the concept should be expanded to ‘contraction, convergence and compensation’ to reflect the historical damage caused by the rich nations (Martinez-Alier 2001). If nothing else, this can only serve to strengthen the use of the original idea by poor countries in climate negotiations.

All is not resolved. There are continued procedural injustices at an international level. For example, the World Trade Organisation and the Conference of the Parties to the Framework Convention on Climate Change have been criticised for operating in a way which makes it difficult for developing countries to participate effectively - as even the more powerful nations admit (EAC, 1999).

high emissions countries will need to reduce their per capita emissions drastically, while poor, low emissions countries will have some room to increase theirs

Rights and Responsibilities: intergenerational

Many policy decisions do not adequately take into account the rights of or effects on future generations. A pervasive example of this is the widespread use of 'conventional' risk assessments in policy making in many fields.

Many decisions dealing with technological risks with potential impacts on the environment - such as chemicals policy, GM technology or nuclear power - make use of an overly 'narrow' risk assessment framework, as argued in previous GECP briefings (GECP 1999, Scott et al. 1999 and GECP 2000).

This approach is usually quantitative, and is taken to epitomise a 'sound scientific' basis for decision-making on risk. However, such procedures fall far short of what is required to address the full potential of many risks.

The widespread use of narrow risk assessment techniques has major environmental justice implications (Stirling, 1999):

- the burden of proof is typically placed on those who stand to be affected, rather than on those advocating the technology. Claimed benefits are assumed, rather than needing to be justified.
- an emphasis on average risks ignores risks to the most vulnerable (see Box 8), and on the rights of industry, rather than wider society. These both downplay the distribution of risks and benefits.
- uncertainty and ignorance are ignored - leading to potential adverse future effects. Risks about which we are uncertain or even ignorant (we don't know what we don't know) cannot be adequately dealt with.

This issue of uncertainty and ignorance is of particular relevance for inter and intra-generational environmental justice. Overall, narrow risk assessments fail to explore the full range of assumptions that might legitimately be employed to frame the available science: which risks have been considered and with what implications for different sectors in society? A broader approach would address a wider range of options and effects and include a variety of different perspectives and possibilities. This would help deliver far more equitable risk management results. It would also be more precautionary in its handling of possible adverse effects.

Far from precaution being anti-scientific, broad-based, 'precautionary' approaches are more scientific than narrow risk assessments in that they acknowledge that risk decisions must embrace different possible assumptions, recognise the incommensurability of many risks and acknowledge the full uncertainties at stake. The precautionary approach also recognises that while science is crucial, it is not a sufficient condition for effective risk management (Stirling et al 1999).

From a political perspective, this approach is likely to hold advantages. As Jacobs argues, a number of recent crises - from GM foods to BSE - have arisen at least in part because uncertainties and ignorance about effects was largely ignored (Jacobs 1999). A more explicit recognition of uncertainty is likely to reduce the potential for major crises.

New tools will be required to complement science to achieve precautionary results and thus reduce environmental injustices. These include approaches such as multi-criteria and scenario analysis - aiming to achieve a broader framework for decision making. They also include deliberative procedures such as consensus conferences and citizen's juries. These aim to determine whether there is justification for the adoption of any particular framing assumption - by appraising the degree to which it is defensible in wider social, political and ethical discourse. Both these sets of measures can deliver more just processes - in that they explicitly broaden the groups of people considered at risk, and aim to involve more people in decisions leading to risk management.

The burden of proof is typically placed on those who stand to be affected, rather than on those advocating the technology. Claimed benefits are assumed, rather than needing to be justified.

Williams notes that many conventional risk assessments are based on an 'average' human model - a white, European, healthy male - which is irrelevant to most of the world's population, in 'stark contrast to the human rights assumption that we should protect the most vulnerable'. Participants at the 1999 Wingspread conference on the precautionary principle argued that 'decisions about toxic chemicals should ask the basic question of whether exposure is safe for a six week old embryo; if not, then the activity should not occur'.

Box 8
Protect
the 'most
vulnerable'



Assessment

'There has been far too little research in this country into the social effects of environmental degradation'.

Some recent changes to the UK policy structure have brought improvements, but there is a long way to go to fulfil the potential of the environmental justice approach.

The implementation of environmental justice will require much better information about the distribution of environmental impacts, both in social and health terms, and use of environmental resources, and more thorough assessment of the distributional impacts of new policies.

Research

Although the initial evidence - some of which has been outlined in this document - indicates the presence of serious environmental injustices in the UK, its basis, severity, distribution, causes and potential resolution remain largely under-explored by research. Environment Minister Michael Meacher has said that: 'There has been far too little research in this country into the social effects of environmental degradation'. More research is needed to assess the extent and causes of current environmental injustices, and their social and health impacts, in order to inform and shape this emerging political agenda. This challenges researchers to establish a cross-disciplinary body of new knowledge and new perspectives. Questions to be addressed include:

- How are environmental impacts and risks distributed socially and in terms of health?
- How is access to environmental resources socially distributed? Do any inequalities provide new support for redistribution, and new ways of approaching redistribution?
- What are the causal processes leading to differential impacts and access to resources?
- To what extent are UK policies and actions contributing to environmental injustice in other countries? What are the implications for the UK of an international perspective? Are we ready, for example, for contraction, convergence and compensation?
- To what extent is there procedural justice in processes of environmental policy and decision-making? Are policy and legal mechanisms inclusive of different social groups?
- What governance responses can and should be made in response to evidence of inequity in environmental impacts and access to resources?

Although some environmental justice issues have been addressed in the work of the Global Environmental Change Programme and other research, there is at present a disproportionately small amount of research directly addressing these issues.

Policy Assessment

New policies need to be assessed for their environmental and distributional impacts. Some recent changes to the UK policy structure have brought improvements, but there is a long way to go to fulfil the potential of the environmental justice approach.

In 1997, the government established a new select committee in the House of Commons - the Environmental Audit Committee (EAC) - with the remit of assessing the environmental impacts of policies and programmes across government. The committee has been highly effective at cross-examining ministers, civil servants and others about the handling of sustainability considerations in decisions. The broad powers of the Committee, its searching investigations, and decision-makers' awareness of its existence, have all injected a new level of seriousness to the status of sustainability considerations across government decision-making.

The EAC has been helpful in pointing to some social issues, including

- the need to address fuel poverty before going further with domestic energy taxes
- government programmes that address symptoms rather than causes, for example by subsidising the fuel poor by three times the amount directed to energy efficiency property improvement³
- the need for cross-cutting reviews where the links between local environmental problems and deprivation are taken into account in regeneration⁴

³ EAC 3rd report session 1999-2000, paragraph 18 and 7th report, session 1998-99, paragraphs 40-42)

⁴ EAC 3rd report session 1999-2000, paragraph 9

There are several gaps in the current approach, however. Environmental issues are part of a broader sustainability and social agenda. However, apart from the above statements, the EAC has not yet addressed the wider social aspects of the sustainability agenda. Second, the size of the task suggests that one Select Committee and its limited resources cannot hope to do all of the necessary work. Our suggestion is that the EAC should be complemented by an independent scrutiny body such as an Environmental Auditor General, in the same way that the Public Accounts Committee runs in parallel to the National Audit Office (NAO)⁵.

⁵ The EAC itself suggested such an arrangement in its first report, 1997-1998 session.

Such an office could help to ensure, for example, that for every government target related to sustainability, the relevant department should produce an explanatory memorandum as to the reasons for the target and the measures to be put in place to achieve it. This would help to overturn the current tendency to produce targets in a vacuum, which as a result are easily forgotten or abandoned.

Another step to improve policy assessment would be to extend the recommendations in the UK and Europe on health impact assessment, so that policymakers in Government and the private sector are always required to assess and report on the social distribution of benefits and problems of policies (see box 9).

H health impact assessment (HIA) is a potential tool for environmental justice. It has been defined as 'the estimation of the effects of a specified action on the health of a defined population' (Scott-Samuel 1998).

HIA is similar in principle to environmental impact assessment. The UK government has recently shown a clear commitment here - all four UK national public health strategies referred to the necessity for health impact assessment of both national and local policies and projects.

The 1998 Acheson report recommended 'that as part of health impact assessment, all policies likely to have a direct or indirect effect on health should be evaluated in terms of their impact on health inequalities, and should be formulated in such a way that by favouring the less well off they will, wherever possible, reduce such inequalities' (Acheson 1998). The Government has accepted this recommendation but has not as yet taken any firm action on it. Again, an organising framework seems missing.

Box 9 Health Impact Assessment

as part of health
impact assessment, all
policies likely to have a
direct or indirect effect
on health should be
evaluated in terms of
their impact on health
inequalities



Participation & capacity

Policy for environmental justice is likely not just to be more democratic but also to be more effective if it provides serious methods for the involvement of those affected by decisions.

Policy for environmental justice is likely not just to be more democratic but also to be more effective if it provides serious methods for the involvement of those affected by decisions. In reality, inequalities and injustices, environmental or otherwise, are in large part a result of the distribution of power. For example, two GCEP studies address this: one on access to environmental justice in Africa and Asia, and one on the use of environmental health and equity information. A GCEP research fellow, Carolyn Stephens, found that policy elites face many constraints in addressing unequal distribution of environmental resources and of unequal health impacts (Stephens 2000). Decisions on re-distribution can take years to follow information in injustices and information can be mis-used. On the other hand, legal gateways for citizens to access environmental justice may be limited or blocked. A 7-country GCEP study by environmental lawyers found that communities in Africa and Asia are often reluctant to take grievances to legal claims. Where litigation is used, the law in practice usually benefits economically advantaged groups. Generally, economically disadvantaged groups lack financial resources and familiarity with legal institutions to use legal gateways effectively (Boyle and Anderson 1996).

Implications for NGOs

This understanding has major implications for environmental organisations working on environmental justice issues. Scandrett argues that there is a major difference between work done with powerful groups and powerless groups. Powerful groups or communities may take on elements of the environmental justice agenda when it corresponds with their own interests. This is useful in ensuring change but also serves to reinforce the interests of those powerful groups - it becomes an agent of hegemony (Scandrett et al 2000).

However, work with powerless groups has strategic importance, because it enables 'cultural negotiation' so that environmentalists genuinely take on the interests of the powerless, and vice versa.

This is an important point for environmental organisations. Various studies have documented that membership of many non-governmental organisations working on the environment is drawn mainly from the professional and knowledge classes (Yearley 1994), yet it is not these people who suffer predominantly from environmental injustices. As one example, Brown notes that 'ethnic communities suffer disproportionately from poor quality environmental conditions, and are usually left out of the processes which could serve to address these conditions' (Brown A, 2000). Other research suggests that there is widespread environmental concern among disadvantaged groups, particularly on local environmental issues, but that the language of and perceptions about environmental groups is off-putting for these groups (Burningham 2001).

This suggests that environmental and NGO groups wanting to address environmental injustices will need to make a concerted effort to work with those people suffering from them.

'ethnic communities suffer disproportionately from poor quality environmental conditions, and are usually left out of the processes which could serve to address these conditions'



Integration

This work integrates and delivers environmental and social objectives, but also has other benefits - for local employment, and social cohesion.

For the greatest benefit to come from this type of action, the national and local authorities charged with regeneration need to make integrated environmental and social actions a core objective.

Integrated policy making is at the heart of action needed on sustainable development - yet this process of integration is still slow, and there is a perception of conflicts between environmental and social objectives. A focus on environmental justice can help the process of integration because it takes as its starting point an explicit focus on the integrated nature of social and environmental objectives. Taking such a perspective can help the process of policy integration at local, national and international levels.

Local level integration

Local environmental improvements are a critical aspect of achieving environmental justice. Poorer or more deprived areas and communities have worse physical environments. This suggests that local environmental improvements can deliver substantial parts of the remits of regeneration bodies, in particular, those of the Social Exclusion Unit and the new delivery body for social exclusion strategies - the Neighbourhood Renewal Unit (NRU) - which is prioritising action in the 88 most deprived local authorities in England.

So far, work linking environmental action and regeneration has been taken forward by the voluntary and community sector - by organisations such as Groundwork working with local communities. This work integrates and delivers environmental and social objectives, but also has other benefits - for local employment, and social cohesion. Some commentators have pointed to the multiple potential benefits of 'environmental regeneration'. On recycling programmes, for example, Worpole says 'they provide work directly in the communities which adopt [them]; many adopt the form of self-managed community enterprises; they are environmentally friendly; and they can help strengthen the social networks of the street and neighbourhood as well. A quadruple dividend in fact' (Worpole 2000). Murray similarly argues that local recycling schemes could generate 40,000-55,000 jobs across the country (Murray 1999).

General 'urban liveability' programmes - such as enhancing public parks, employing wardens to make areas secure, reducing traffic speeds and introducing home zones, increasing public transport provision, cycle paths and pedestrian areas (Jacobs 1999) would directly meet environmental and social exclusion goals simultaneously. This is an approach endorsed by the prime minister in his April 2001 speech on local quality of life, and can now be formally integrated into the many regeneration programmes across government (Blair 2001). For the greatest benefit to come from this type of action, the national and local authorities charged with regeneration need to make integrated environmental and social actions a core objective.

the lack of joined-up government continues to prove extremely damaging

The Social Exclusion Unit's 2001 strategy on Neighbourhood Renewal starts to do this - it has included tackling 'a poor physical environment' as one of five priorities (alongside education, health, employment and crime). This is yet to be backed up with concrete proposals to ensure that this goal is acted upon, and is a key area for the development of policy. Some immediate actions could include:

- The NRU and SEU in their role of 'policy-proofing' across government can ensure that each new policy is assessed for its distributional implications.
- The NRU can give explicit guidance to Local Strategic Partnerships and New Deal for Communities (NDC) that authorities should assess environmental and transport impacts and include actions to tackle them, in their Local Neighbourhood Renewal and NDC Strategies.
- The NRU can give guidance that bids for environmental regeneration projects in deprived communities would be prioritised through, for example, the new 'Community Chest' funding streams.

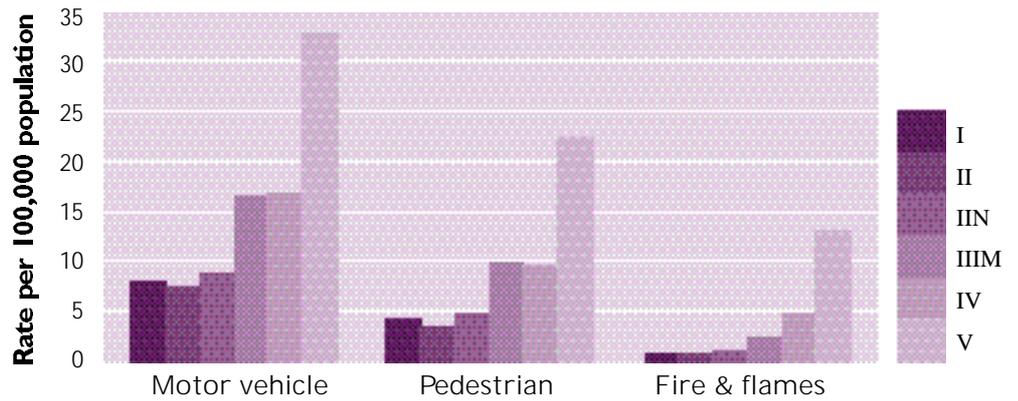
National level integration

An environmental justice perspective can help to cut through perceived conflicts between social and environmental objectives. It clarifies the central role for the objective in the Government's sustainable development strategy to 'ensure everyone has a decent environment'. Boardman has shown that isolated environmental policies often fail on social grounds, and that isolated social policies often fail on environmental grounds (Boardman 1999). She argues that integrated policy 'packages' - involving combinations of tax measures, investment, regulation, and market transformation - can deliver simultaneous environmental and social objectives. These carefully designed packages could be put in place across a wide range of policy areas in which there are major environmental injustices. Boardman sets out examples for transport and housing.

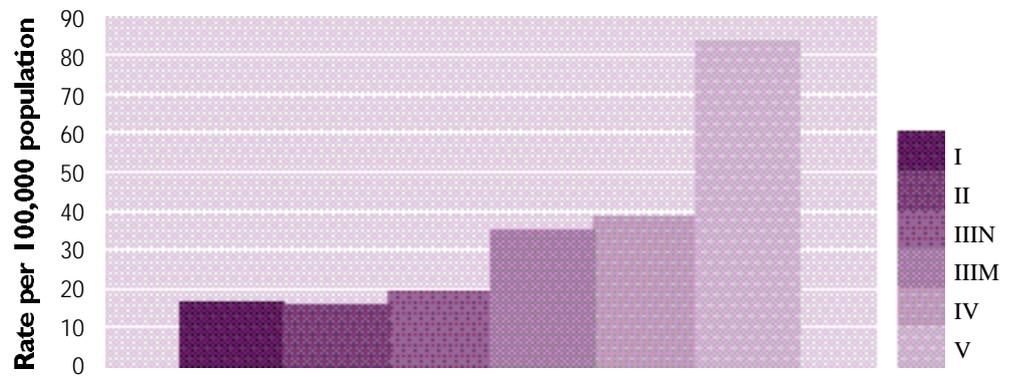
These packages, and actions at a local level, can be aided by environmental reform of the tax system. The introduction of the climate change levy in April 2001 - where industrial energy taxes are introduced at the same time as reducing national insurance contributions - is a good example of the type of measure that could transform the tax system to provide more incentives for employment and resource productivity. Such 'environmental tax reform', if designed carefully especially with respect to the distributional effects, could aid progress towards environmental justice. These themes have been developed in detail by Global Environmental Change Programme researchers such as Pearce, Barker and Ekins since the 1980s⁶.

⁶ See the 1994 GECP Briefing no 2: 'Eco-nomic Tax Reform: the wiser use of nature and the wider use of labour' at www.sussex.ac.uk/Units/gec/pubs/briefing/briefs.htm

Childhood mortality rates for external cause aged 0-15 by social class, England and Wales 1989-1992 combined.
Roberts & Power 1996



Childhood mortality rates for injury and poisoning aged 0-15 by social class, England and Wales 1989-1992 combined.
Roberts & Power 1996



Similar arguments can be made for making investment, regulatory and pricing structures progressive; Boardman suggests a broad set of principles to guide the mechanics of policy integration in these areas (Boardman 1999). But again, Jonathon Porritt, Chair of the UK government's Sustainable Development Commission, finds that in pursuing 'sustainable development, which is both inter-disciplinary (in that it embraces so many different policy areas within its frame of reference) and cross-sectoral (in that it depends on all sectors for on the ground delivery), the lack of joined-up government continues to prove extremely damaging' (Porritt 2001). This area still requires a strong steer from central government.

There are also dangers from an un-integrated approach. For example, if one type of social exclusion problems are tackled without integrating environmental issues, other social exclusion problems can worsen. On transport, if the difficulty of access to jobs and services is tackled by increasing mobility, then two sorts of social problems can be exacerbated. First, unequal local impacts - noise, air pollution, danger, accidents and community severance are likely to increase. Second, there are likely to be greater global impacts, for example with greater carbon emissions. An integrated approach to tackling social exclusion problems in transport would look at reducing the need to travel, and reducing the impacts caused by travel, as well as increasing people's ability and options for travel.

An integrated approach to tackling social exclusion problems in transport would look at reducing the need to travel, and reducing the impacts caused by travel, as well as increasing people's ability and options for travel.



Challenges ahead

Policy-makers need to bear social justice dimensions in mind during the design of environmental policies, and environmental factors in the development of social policy.

The argument of this briefing has been that social justice issues have increasingly clear environmental dimensions, and that the environment is a carrier for a growing collection of threats to human health and well-being. Many of these threats have not been 'caused naturally' by the environment but by people and organisations: they are socially created injustices. The impacts on people, though often principally seen as health problems needing treatment, are first and foremost injuries and justice problems. New tools for legal redress represent support for those disadvantaged now and are a serious challenge to those currently acting irresponsibly.

The detailed recommendations given above form a clear agenda for the implementation of environmental justice:

- Environmental justice represents a substantial research agenda for research funding agencies and foundations.
- Policy-makers need to bear social justice dimensions in mind during the design of environmental policies, and environmental factors in the development of social policy.
- Environmental justice provides strong analytical support for a new emphasis on anticipatory planning among business leaders, politicians and their advisors, and the medical and legal professions.
- Environmental justice challenges firms to analyse and explain the social and health impacts of their activities beyond their current focus on 'environmental' reporting.
- Environmental justice provides a new framework and new tools for communities to access in pursuit of their current and future rights.



References

Accion Ecologica (1999) Initial Proposal on Ecological Debt

Acheson, D, Barker, D, Chambers, J, Graham, H, Marmot, M, Whitehead M. (1998) The 'Acheson Report': Independent Inquiry into Inequalities in Health, The Stationery Office, London:164.

Agyeman, J. (2000) Environmental Justice: From the Margins to the Mainstream. London, TCPA.

Anderson, M (1996) Human Rights Approaches to Environmental Protection: An overview in human rights approaches to environmental protection. A. Boyle and M. Anderson (eds) Oxford, Oxford University Press.

Blair, T. (2001) Speech on Improving your local environment, 24 April 2001.

Boardman, B. with S. Bullock and D McLaren (1999). Equity and the Environment. London, Catalyst Trust. September.

Boyle A and Anderson M: Human Rights Approaches to Environmental Protection. Clarendon Press: Oxford, 1996, 313p.

Brown, A (2000) Environmental Justice - views from the Black Environmental Network Environmental Justice Seminar Friends of the Earth/London School of Hygiene & Tropical Medicine. WHO Ministers Conference on Environment and Health. London, June 1999.

Bryant, B. (1995) Environmental justice, Island Press, Boston.

Burningham, K. (2001). The environmental concerns of disadvantaged groups. Guildford, University of Surrey.

Carley, M and Spapens, P. (1998). Sharing the World. London, Earthscan

Christie, I. (1998) in Warburton, D. (ed), (1998). Community and Sustainable Development. London, Earthscan.

CPRE, (1999). Traffic trauma or tranquillity. London, Council for the Protection of Rural England.

DETR (2001a). Road Accident Involvement of Children from Ethnic Minorities. London, Department of the Environment, Transport and the Regions.

DETR (2001b). The UK Fuel Poverty Strategy. London, Department of the Environment, Transport and the Regions.

DETR (1998). The Impact of Large Foodstores on Market Towns and District Centres. London, TSO, Department of the Environment, Transport and the Regions.

Department of the Environment (1996). English House Condition Survey. London, DOE.

Dolk H, et al. Risk of congenital anomalies near hazardous waste landfill sites in Europe: The Eurohazacon Study. Lancet 1998. 352:423-27.

Dobson A: Justice and the Environment. Oxford University Press, 1998.

Dobson A: Fairness and Futurity. Oxford University Press, 1998.

Douglas-Scott, S (1996). Environmental Rights in the European Union: Participatory Democracy or Democratic Deficit in Human Rights Approaches to Environmental Protection. A. Boyle and M. Anderson (eds). Oxford, Oxford University Press: 109-129.

European Environment Agency (1999). Children in their environment: vulnerable, valuable and at risk. Background briefing on children and environmental health. WHO ministerial Conference - Environment and Health London, 16-18 June 1999. Copenhagen, European Environment Agency.

Edwards, S.M., T. Edwards and C. Fields, (1996) Environmental Crime and Criminality: Theoretical and practical issues. Garland Publishing, New York and London.

Environmental Audit Committee (1999). 2nd report. World Trade and Sustainable Development: An Agenda for the Seattle Summit. London, TSO.

Environment Agency (2000). Achieving Environmental Equality. Bristol, Environment Agency.

Friends of the Earth (2000). Climate change and equity. London, Friends of the Earth

Friends of the Earth (2001). Pollution and Poverty - Breaking the Link. London, Friends of the Earth.

GECP (2000). Risky Choices, Soft Disasters: Environmental Decision-Making under Uncertainty. Brighton, Global Environmental Change Programme (GECP) of the Economic and Social Research Council: 24pp, April, also at www.gecko.ac.uk.

GECP (1999). The Politics of GM Food: Risk, science and public trust. Brighton, Global Environmental Change Programme of the Economic and Social Research Council, Special Briefing No. 5: 24pp, October also at www.gecko.ac.uk.

Hofrichter, R. (ed.) (1993) Toxic Struggles: The theory and practice of environmental justice. New Society Publishers, Philadelphia.

The Independent (2001) Judges want to scrutinise science advisers, 29th May.

Jacobs, M. (1999) Environmental Modernisation: The new Labour agenda, London, Fabian Society, pamphlet 591.

Jenkins, R. (2000) Introduction, Conclusion and chapter 1: 'Globalisation, trade liberalisation and industrial pollution in Latin America', in Jenkins, R. (ed.)



References continued

Industry and Environment in Latin America, Routledge, London.

Mabey, N. and R. McNally (1999) Foreign Direct Investment and the Environment: From Pollution Havens to Sustainable Development. London WWF-UK Report.

Martinez-Alier, J. (2001) at www.bridging.environment.se. Paper presented to the 'Bridging the Gap' conference in Stockholm, May 2001.

Martinez-Alier, J. (1998) in Agarwal A and S Narain, Globalisation: an agenda to tame the tiger. http://www.ms-dan.dk/uk/Politics_press/Articles/cse_globe.htm

Murray, R (1999). Creating wealth from waste. London, Demos.

National Statistics (2000). Mortality Statistics. London, Stationery Office.

Pearce, D., Barbier, E., and Markandya, A. (1990). Sustainable Development. Economics and Environment in the Third World. Vermont, Edward Elgar Publishing Limited.

Perry A and Anderson MR: Access to Environmental Justice in Bangalore: Legal Gateways in Context. School of Oriental and African Studies, March 1996, 102p. (SOAS Law Department Working Papers No. 12)

Porritt, J. (2001) So what's next? Green Futures edition 28, pp 24-25. Forum for the Future, London, May/June.

Roberts, I and C. Power, (1996). Does child injury mortality vary by social class? A comparison of class specific mortality in 1981 and 1991. British Medical Journal, 313:714-786.

Ryder, R (1999). "No-one ever died from dioxin". The dioxin problem in Britain. The Ecologist 29(6):369-374.

Sandau, C, Ayotte, P, Dewailly, E et al (2000) Analysis of hydroxylated metabolites of PCBs (OH-PCBs) and other chlorinated phenolic compounds in whole blood from Canadian Inuit Environmental Health Perspectives Vol 8 no 7, 108:61-616.

Scandrett, E, Dunion, K, McBride, G (2000). The Campaign for Environmental Justice in Scotland. Edinburgh, Friends of the Earth Scotland.

Scott, A., A. Stirling, N. Mabey, F. Berkhout, C. Williams, C. Rose, M. Jacobs, R. Grove-White, I. Scoones and M. Leach (1999). Precautionary approach to risk assessment. Nature 402(25 November 1999):348

Scott-Samuel A (1998) Health Impact Assessment - theory into practice Journal of Epidemiology and Community Health, 52, 704-5.

Social Exclusion Unit, (2001). A New Commitment to Neighbourhood Renewal: National Strategy Action Plan. London, Cabinet Office.

Stephens C (2000) Inequalities in Environment, Health and Power - reflections on theory and practice in Pugh, C (ed) Urban Sustainable Development in Developing Countries. Earthscan Publications

Stevenson S, Stephens C, Landon M, Pattendon S, Wilkinson P, Fletcher T (1998) Examining the inequality and inequity of car ownership and the effects of pollution and health outcomes such as respiratory disease Epidemiology Vol 9 4 S29.

Stirling, A., O. Renn, A. Rip and A. Salo (1999). On Science and Precaution in the Management of Technological Risk, report for the European Commission Forward Studies Unit. Brighton, SPRU (Science and Technology Policy Research):56pp, May.

UN Commission on Human Rights (1994), Sub Commission on Prevention of Discrimination and Protection of Minorities. Human Rights and the Environment, Final Report of the Special Rapporteur, UN Doc. E/CN.4/Sub.2/1994/9 (6 July 1994) 74.

Walker, G, Fairburn, J, Bickerstaff, K, (2000). Ethnicity and risk: the characteristics of populations in census wards containing major accident hazard sites in England and Wales. Occasional paper 15, Department of Geography, University of Staffordshire.

Warhurst, Dr. A. (2000) 'Mining and the Environment' in Jenkins, R. (ed.) Industry and Environment in Latin America, Routledge, London.

Wilkinson P, Landon M, Armstrong B, Stevenson S, Pattenden S, McKee M and Fletcher T (2001) Cold Comfort: The social and environmental determinants of excess winter deaths in England, 1986-96. Policy Press for Joseph Rowntree Foundation.

Williams, C. (1997) Terminus brain: the environmental threat to human intelligence, Cassell: London, p203.

Williams, C. (1998) 'An environmental victimology' in Williams C. (ed.) Environmental victims, Earthscan, London.

Woolf (1995) Access to Justice. Interim Report to the Lord Chancellor on the civil justice system in England and Wales (HMSO)

World Economic Forum, Global Leaders of Tomorrow Environment Task Force (2001). 2001 Environmental Sustainability Index. Geneva, World Economic Forum.

Worpole, K. (2000). In our backyard: the social promise of environmentalism. London, Green Alliance.

Yearley, S (1994) Social Movements and Environmental Change in Social Theory and the Global Environment ed by M. Redcliff and T. Benton, London, Routledge Global Environmental Change series.

Contacts & contributors

Overall contributors

Maria Adebawale, Capacity
Dr Julian Agyeman, Tufts University
Adam Brown, Black Environment Network
Chris Church, ANPED Northern Alliance for Sustainability
Professor Andrew Dobson, former GECP researcher, Keele University
Bob Evans, South Bank University
Michael Jacobs, Fabian Society, former GECP fellow
Nick Mabey, WWF, former GECP researcher
Eurig Scandrett, Friends of the Earth Scotland
Dr Alex Scott-Samuel, University of Liverpool
Professor Paul Selman, former GECP researcher, Cheltenham College of Higher Education
Dr Andy Stirling, former GECP Fellow, SPRU, University of Sussex
Dr Gordon Walker, Staffordshire University
Dr Chris Williams, former GECP Fellow, Institute of Education

We are also grateful for comments, suggestions and information from:

Achinto, Kolkata, India.
Terry Barker, Cambridge University and former GECP researcher
Dr Frans Berkhout, former Co-Director of the GECP, SPRU, University of Sussex
Brenda Boardman, Oxford University, Environmental Change Unit
Paul Ekins, Policy Studies Unit and former GECP researcher
Rhys Jenkins, UEA and former GECP researcher
Dr Simon Lewin, London School of Hygiene and Tropical Medicine
Duncan McLaren, Friends of the Earth
Richard McNally, WWF
Professor Tim O'Riordan, Centre for Social and Economic Research on the Global Environment, UEA
Professor Susan Owens, Cambridge University Geography Department and former GECP Fellow
David Pearce, CSERGE UCL
Dr Ian Roberts, London School of Hygiene & Tropical Medicine
Simon Stevenson, London School of Hygiene & Tropical Medicine
Dr Martine Vrijheid, London School of Hygiene & Tropical Medicine
Dr Alyson Warhurst, Warwick university, former GECP researcher
Dr Paul Wilkinson, London School of Hygiene & Tropical Medicine
Carol Zagovich, Friends of the Earth

Contacts:

ANPED, <http://www.anped.org>
Black Environment Network, 01286 870715 (Wales), 0207 278 2322 (London)
Environmental Law Foundation, <http://www.greenchannel.com/elf/>
ESRC Global Environmental Change Programme, www.susx.ac.uk/Units/gec/index.html
Friends of the Earth England, Wales and Northern Ireland, www.foe.co.uk, 0207 490 1555
Friends of the Earth Scotland, www.foe-scotland.org.uk, 0131 554 9977
Food Justice Campaign, www.sustainweb.org
Groundwork, www.groundwork.org.uk
London School of Hygiene and Tropical Medicine (LSHTM), www.lshtm.ac.uk
Trade Justice Movement, www.tradejusticemovement.org.uk
UK Environmental Justice Network, info@capacity.org.uk, 0208 469 4671
USA Environmental Justice Resource Center, <http://www.ejrc.cau.edu/>
USA Silicon Valley Toxics Coalition, <http://www.svtc.org/>

Design & diagrams:
Jenny Hughes 01273 566075

Printed on Zanders Mega Matt
which is 50% recycled & de-inked fibres & 50% chlorine free virgin pulp from a sustainably managed forest. Printed in England by APRPrint & Design.

Special Briefing No 7

Environmental justice

Rights and means to a healthy environment for all

Hard copy can be ordered from Friends of the Earth,
56-58 Alma Street, Luton LU1 2PH (quote code 503)
or downloadable from
www.foe.co.uk/resource/reports/environmental_justice.pdf

Published by the ESRC Global Environmental Change Programme

ISBN 0 903622 95 5

This document should be referenced as:
ESRC Global Environmental Change Programme (2001)
Environmental justice: Rights and means to a healthy environment for all.
Special Briefing No.7, University of Sussex.