



Northern Ireland Sustainability Indicators

21 measures of a sustainable society for the 21st century

Consultation Document



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as a local response to the New York Earth Summit, 1997.

Sustainable Development

In June 1992 the world's leaders attended the United Nations 'Earth Summit' in Rio De Janeiro, Brazil. It was the largest gathering of heads of government that the world has ever seen. Attending were 120 world leaders and delegations from 178 countries.

One of the four main agreements to emerge from the Rio conference was Agenda 21, so called because it was intended to provide a blueprint for sustainable development for the 21st century.

Sustainable development means balancing our current needs for economic prosperity and improving our quality of life with the needs of future generations. It has also been defined as living within the carrying capacity of the world's ecosystems or as living on nature's interest and not eroding the capital. It is about looking at the long-term consequences of all activities and decisions. Sustainable development is also about here and now, looking at ways in which we can create a more equitable society where opportunities are available for everyone to enjoy a good quality of life.



The diagram helps to show that sustainable development gives equal attention to social, economic and environmental issues and is concerned with the overlaps and interactions among these issues.

Sustainable development is about more than simply caring for the environment. The Agenda 21 agreement promotes an integrated approach to environmental protection, social equity and economic development. It recognises that progress in all three areas must proceed together to achieve a sustainable society. Emphasis on one area at the expense of the others is not sustainable.

Following the Earth Summit, the United Nations set up a special Commission for Sustainable

Development (CSD) to ensure that progress was made at every level, from national governments to community groups and individuals. It is not just the responsibility of governments to sort out our environmental, social and economic problems. Every organisation, business, school, youth group and individual household has an impact (positive or negative) on the state of our environment and society.

As more people and organisations become aware of Agenda 21 they will start to see their individual actions in the context of a worldwide programme of activity where 'the whole is greater than the sum of the parts'. As part of this global programme, the CSD has proposed the use of sustainability indicators at national and local levels to measure progress on the implementation of Agenda 21 and to give us a clearer idea of the changes that are taking place.

What happened after the Earth Summit when the government leaders returned home to their usual preoccupations? Have the Earth Summit agreements had any influence over the state of our society and the condition of our environment? World leaders met again in June 1997 at the United Nations in New York to review the progress which has been made at the international level since 1992.

This report has been produced in response to that meeting, and to record the progress we have made in Northern Ireland over the last few years.

The Idea of Indicators

All our decisions and actions are based on information. The better the information about the state of our society or our local environment and the impact that our actions may have, the better the decisions we can make.

A list of over 100 possible indicators of sustainability was identified as part of a national UK study. From that list a set of 21 indicators has been selected to convey the scope of sustainable development and the links between social, economic and environmental matters, and to give an indication of how sustainable Northern Ireland is in 1997. The combination of the 21 sustainability indicators is intended to answer objectively the simple question; 'Are things getting better or worse?'

The indicators have been organised around the three central themes of sustainable development, (i) environmental stewardship, (ii) economic opportunity and (iii) social equity. Sustainable development is concerned with both the range of issues (shown by the indicators selected) and the connections among these issues.

Understanding the Indicators

Indicators are intended to:

- help measure progress towards sustainability,
- give people an understanding of what sustainability means, and
- show what actions are needed to help make the local environment and community more sustainable.

If they are to help guide our activities, indicators of sustainability must be **quantifiable** (directly or indirectly measurable), **robust** (provide an overview without being too general), **relevant** (have an identifiable impact on peoples' lives), and easily **understood** by decision makers, including the public.

With each of the 21 indicators we have attempted, where possible, to convey three pieces of information;

- I. the current state
- II. the long-term trend or rate of change
- III. how Northern Ireland compares with Great Britain or other European countries.

Each of the indicators has been awarded a symbol assessing its impact on sustainability:



for those indicators which appear good in comparison with other parts of the country or which are moving towards sustainability.



for those indicators which appear poor in comparison with other parts of the country or which are moving away from sustainability.



for those indicators which show little or no change, either in local conditions, in comparison with other parts of the country, or where there is inadequate up-to-date information to make an objective assessment.

A written *description* of each measure explains the relevance of the indicator, the links with other measures and the reasons for its selection. A short *analysis* of the local trends and national comparisons explains what the figures actually show, and the *implications* of the results highlight areas of responsibility and possible actions to improve the situation.

A summary sheet of all 21 indicators gives an idea of the sustainability of Northern Ireland.

This shows that, while the economy appears to be performing well and social equity improving, there are concerns with our environmental performance. Seven indicators are moving towards sustainability, while eight indicators are uncertain or show no improvement, and six are moving away from sustainability.



Selecting the Indicators

These indicators have been selected with the general public in mind. Each individual must understand why sustainable development is important and how it affects them if they are to support the changes needed to become a more sustainable society.

The limitations of the monitoring information available have had an influence on the final set of sustainability indicators chosen. We hope to improve on these in the future as more appropriate and up-to-date information becomes available. We have followed the principle of Best Available Data Not Entailing Excessive Cost (BADNEEC) in compiling this report. This report is a starting point for consultation, discussion and stimulation of individual, corporate and local authority action.

This document is designed to be part of a process of change. Some of the indicators have been selected because they were felt to be provocative and that people might be challenged by the information presented. It is up to each individual to assess and interpret the information with regard to what they feel is important to them. If the indicators mean little to you, then please let us know so they can be improved.

This report is an imperfect starting point in the use of indicators of sustainable development, but it is a beginning. Its success in stimulating individuals and organisations to change their behaviour will depend on the indicators being meaningful and accessible. You can help with this process. More details of how to find out more about and become involved in the Local Agenda 21 process can be found at the end of this report.

Northern Ireland Sustainability Indicators Summary Table








**Indicators
1-7**

Environmental Stewardship

- | | | | |
|---|-------------------|---|--|
| 1 | Domestic Waste |  | Levels of domestic waste produced. |
| 2 | Urban Sprawl |  | Private house building on greenfield sites. |
| 3 | Energy |  | Energy use and level of renewable energy supply. |
| 4 | Wildlife Habitats |  | Number and area of designated ASSI's. |
| 5 | Water Quality |  | Pollution incidents, fish kills and water quality in rivers. |
| 6 | Air Pollution |  | Urban concentrations of sulphur dioxide and smoke. |
| 7 | Transport |  | Level of public transport use. |








**Indicators
8-14**




Economic Opportunity

- | | | | |
|----|---------------------|---|--|
| 8 | Poverty Level |  | People living on income support. |
| 9 | Regional Economy |  | Gross domestic product as a percentage of UK level. |
| 10 | Jobs |  | Percentage of workforce employed in the public sector. |
| 11 | Unemployment |  | Level of long-term unemployment. |
| 12 | Family Expenditure |  | Percentage of household expenditure spent on basic goods and services. |
| 13 | House Prices |  | Average house prices. |
| 14 | Environmental Costs |  | Public attitudes to the cost of protecting the environment. |

**Indicators
15-21**

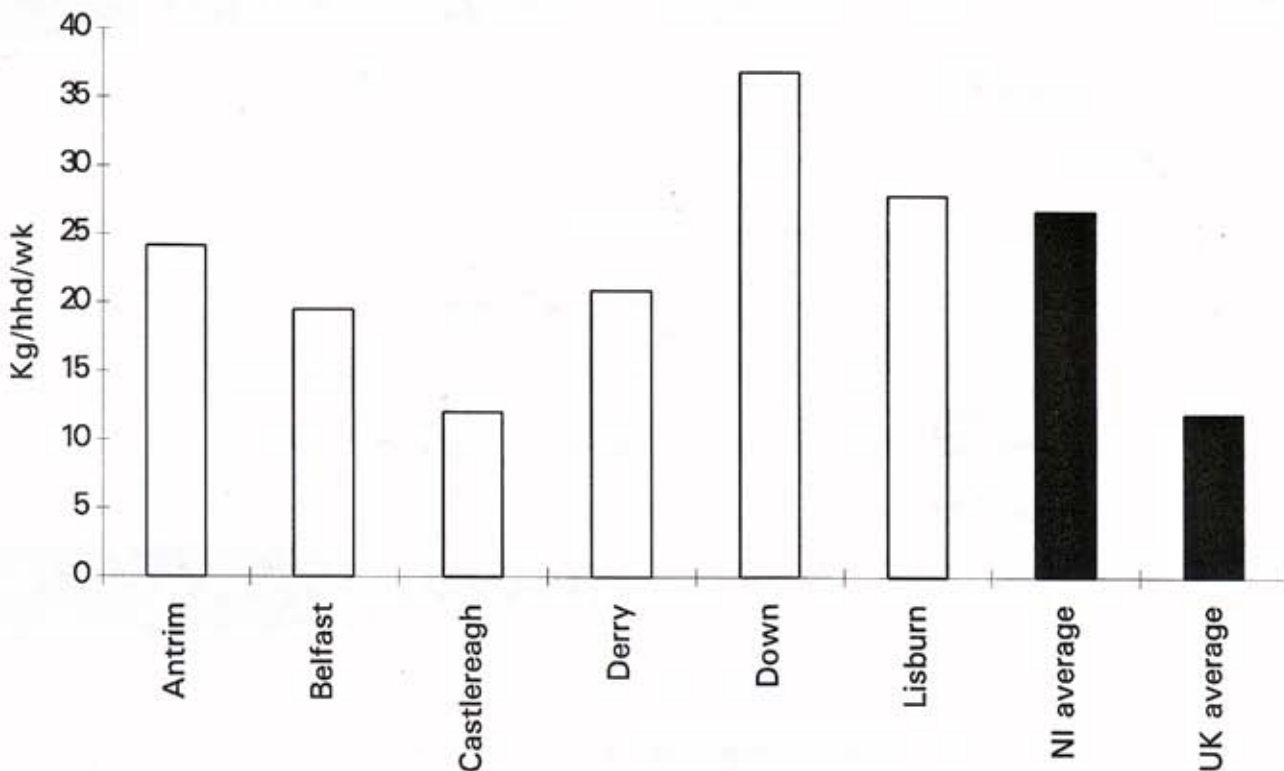
Social Equity

- | | | | |
|----|---------------------|---|--|
| 15 | Health |  | General mortality and infant mortality rates. |
| 16 | Road Safety |  | Number of fatal and serious injury road traffic accidents. |
| 17 | Housing |  | Percentage of population living in fit dwellings. |
| 18 | Places and Spaces |  | Conservation Area designations and protective listing of buildings. |
| 19 | Education |  | Attainment levels of school leavers. |
| 20 | Security |  | Number of burglaries and perceptions of outdoor safety. |
| 21 | Community Relations |  | Level of sectarian segregation and perceptions of community relations. |

 moving towards sustainability
  no change
  moving away from sustainability

1 Domestic Waste ☹️

Levels of domestic waste in Northern Ireland (kg per household per week)



Description Producing less waste, reusing materials and encouraging recycling are all fundamental ways in which we can reduce the depletion of finite materials and lessen the pollution of air and water which can result from most forms of waste disposal.

There are often links at both local and global levels between the prosperity of an area and the level of waste it produces. National UK trends show that both the levels of household waste and household expenditure have grown over the last ten years. At the same time, the cost of disposing of waste continues to rise, particularly with the introduction of the landfill tax. New industries and services are growing up around waste reduction and pollution prevention. Jobs are being created in recycling and energy recovery from waste.

Analysis It is clear when we look at the levels of domestic household waste (sample figure for 1993) that Northern Ireland produces far more per capita than the rest of the UK. There are also clear differences among Council areas in Northern Ireland, which may be a result of different waste management strategies. At the province-wide scale, the low level of recycling is a key factor. Only 21% of the population of Northern Ireland regularly returns waste for recycling compared to 35% in Great Britain. Public attitudes to waste

reduction and recycling will have to change if we are to manage our waste more sustainably.

Implications It is estimated that household waste accounts for only 4.5% of the 400 million tonnes of waste produced in the UK every year. However, every individual as well as every organisation can reduce the level of waste they produce, for example by composting organic material and returning waste for recycling. It is estimated that at least 50% of all household waste is potentially recyclable. People can be more selective as consumers in buying products which are re-usable, recycled, recyclable or which have minimal packaging.

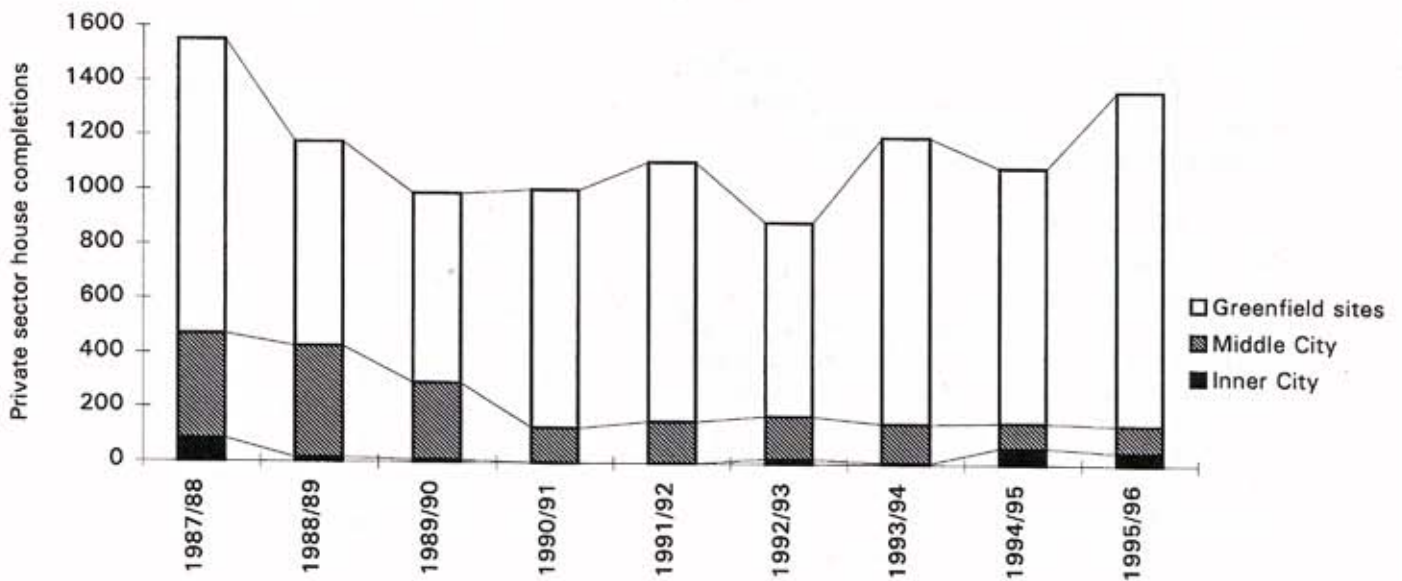
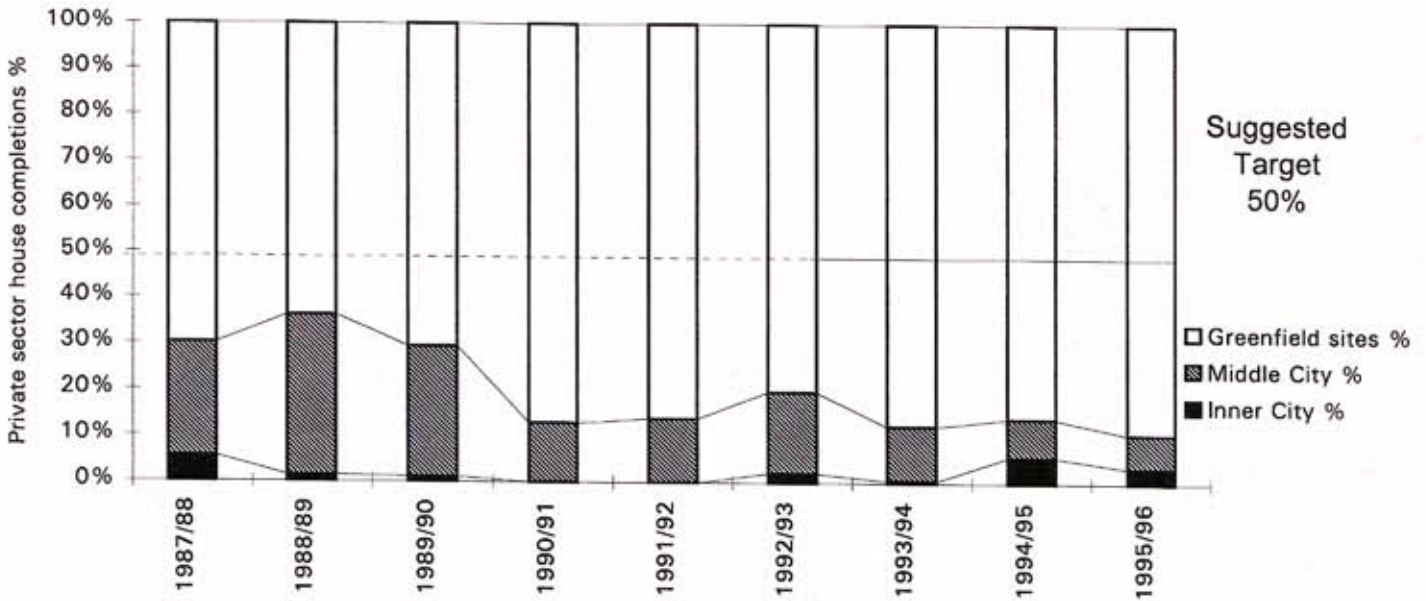
Time is running out for many of our local landfill sites - sites which have had shorter lifetimes than originally anticipated. Many local authorities are looking at alternative strategies which include incineration and recycling. The DoE is also preparing a Waste Management Strategy for Northern Ireland. There is an opportunity to make your views known and to find out more about ways of reducing waste and identifying your local recycling facilities.

Sources Curry, R (1993) "Recycling of Domestic Waste in Northern Ireland", NI 2000, Belfast.

Stringer, P (1992) 'Environmental Concern' pp 18-38 in Stringer, P and Robinson, G (eds) "Social Attitudes in Northern Ireland: 2nd Report 1991-92", Blackstaff, Belfast.

2 Urban Sprawl ☹️

Number and percentage of private house building on greenfield sites (Belfast City Region)



Description Land is a finite resource and continual change in its use from countryside and agriculture to urban development is ultimately unsustainable. It is the responsibility of the Planning Service to ensure that we make the most efficient use of our greenfield land. Any new development should be located where it can take advantage of existing services, facilities and infrastructure and where people are not overly dependent upon car use. This usually means encouraging new development to be situated within our existing built-up areas.

Analysis The local figures suggest that less than 15% of new homes are being built in existing urban areas, the remainder being located in suburban estates or open countryside. These figures only relate to the Belfast City Region, but

with similar planning policies throughout the urban areas of Northern Ireland it is likely they are representative of the overall trend to suburbanism and loss of greenfield land to new development.

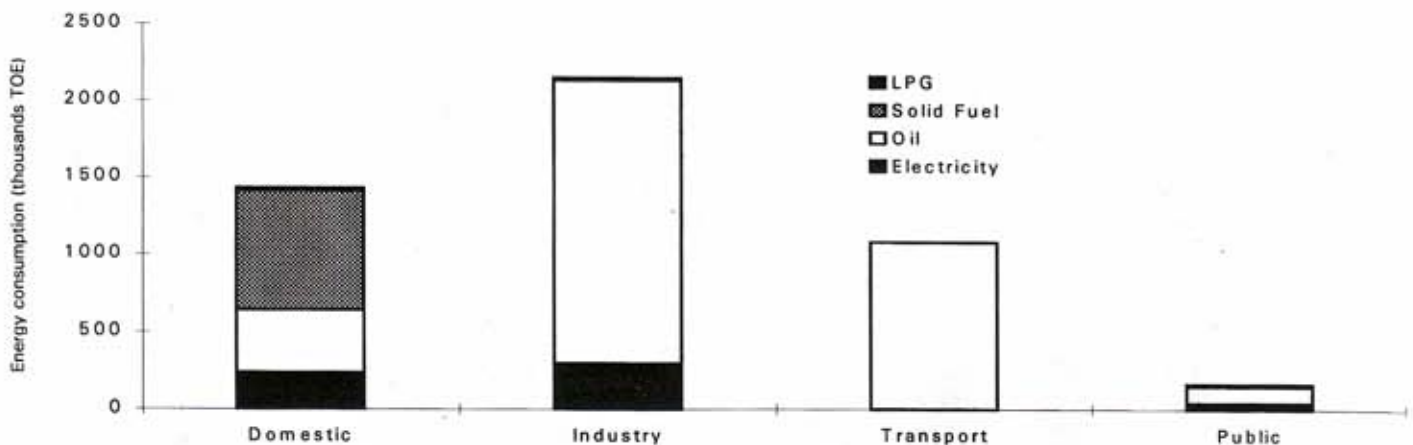
Implications The UK Government has set a target of 50% for all new development to be accommodated within existing urban areas. This target includes new development in Northern Ireland. Recent ministerial speeches relating to England and Wales have suggested that this target should be increased to 60% or more.

Sources Department of the Environment (1996) "Sustainable Settlements and Shelter: The United Kingdom National Report for Habitat II", HMSO, London.

Housing completion figures from DoE(NI) Planning Service, Belfast Divisional Planning Office.

3 Energy ☹️

Total energy consumption in Northern Ireland (1992)



Description The total level of energy consumption (measured in Tonnes of Oil Equivalent, TOE) in Northern Ireland can be split into type of fuel and by different groups of consumers, with domestic consumers comprising around 12% of the total. The levels of energy consumption and type of fuel used can have significant effects on the environment. Climate change, acid rain and poor air quality can all be expected to increase as long as we continue to exploit non-renewable fossil fuel sources and increase our overall energy consumption.

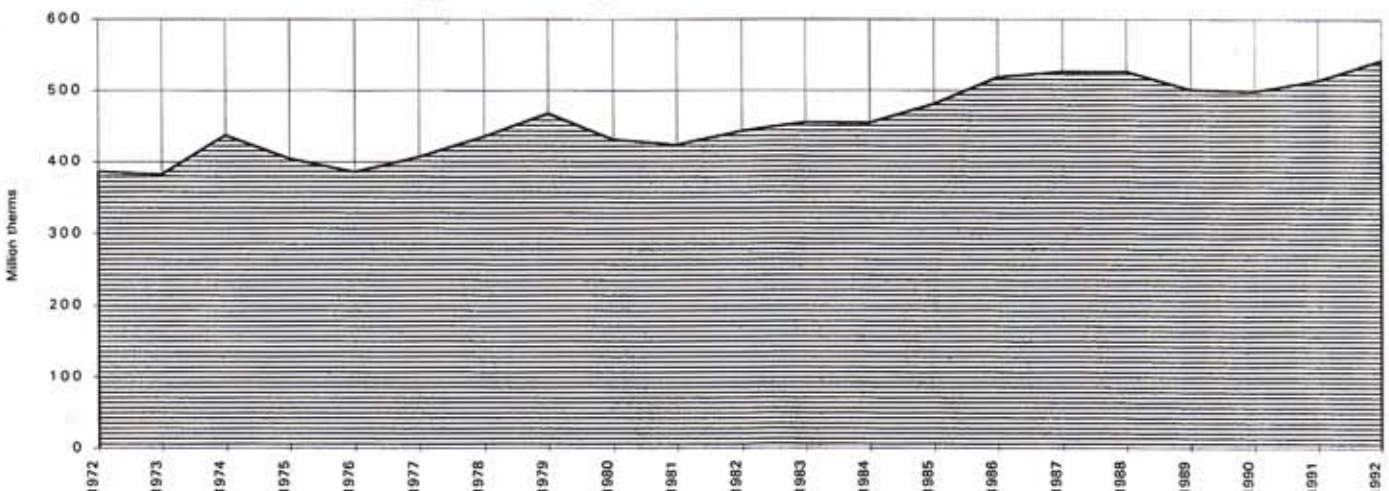
Analysis There has been a steady rise in both the total energy consumption and the domestic energy consumption in Northern Ireland. This rise is in spite of any energy efficiency measures. In the domestic sector, solid fuel (which is one of the least 'clean' fuels available) accounts for 55% of energy requirements, and oil 30%; (compared to 10% and 7% respectively for the UK as a whole). There is a growing importance given to renewable energies (shown in table), but it still only makes a minor contribution (currently less than 2%) to our overall energy demand.

Renewable technology	Maximum Estimated Contribution (MEC) by 2000	MEC as a percentage of total demand	Estimated current installed capacity
Wind	50	2.5	1.5
Biofuels	23	2.95	n/a
Energy from Waste	20	2.5	n/a
Hydro	6	0.5	0.2

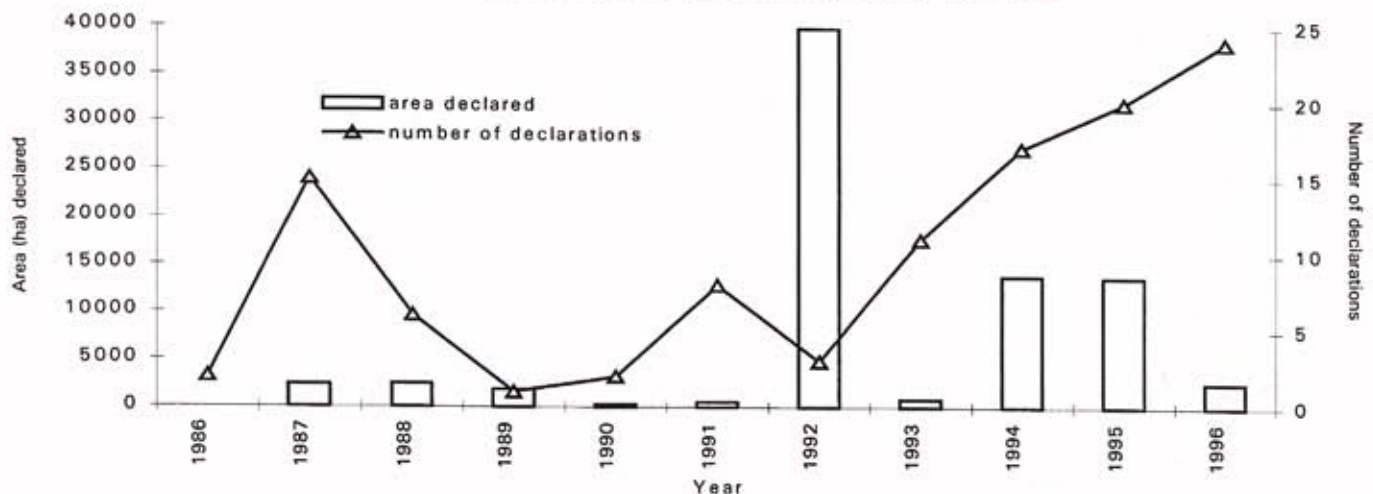
Implications Natural gas accounts for 64% of energy consumption within the UK domestic sector but has until recently been unavailable in Northern Ireland. The new source of natural gas may have a measurable effect on the future environmental effects of our energy consumption. Further investment needs to be made in a range of renewable energy sources, and complementary action needs to be taken to reduce our overall energy consumption through improved energy efficiency, conservation and changing lifestyles.

Sources Energy Efficiency Service of the Department of Economic Development, B9 Energy Services Ltd, and the Institute of Energy (NI Section).

Total domestic energy consumption in Northern Ireland



Number and area of designated ASSIs in Northern Ireland



Description Endangered species and natural habitats are important for their own sake and as resources for this and future generations. Diversity within nature enhances the quality of life and the environments where we live and work. Yet important wildlife areas are constantly under threat, for example from new development, roads and modern agricultural practices. Some species, such as the Corncrake, are dependent upon specific habitats and their sensitive management for survival. The status of rare species and the statutory protection we give to key habitats is a useful measure of how we value wildlife and biodiversity.

Analysis Ideally, areas under the protection of Area of Special Scientific Interest (ASSI) designation should be subject to sensitive and appropriate management regimes agreed between the Environment and Heritage Service and the landowner. Designation alone is not adequate to counter threats to important wildlife habitats; proper management and monitoring are also required. Information on management practices in ASSIs is not publicly available.

Implications Many areas not designated are still important for wildlife. Key types of habitat such as semi-natural grasslands, heathland, wetland, marine environments and woodland (shown below) are vital to the biodiversity of Northern Ireland. All these face their own particular threats and require a more detailed understanding of current land-use practices and their impacts. Sensitive management of the whole countryside is required.

Comparative woodland cover for Northern Ireland (1995)

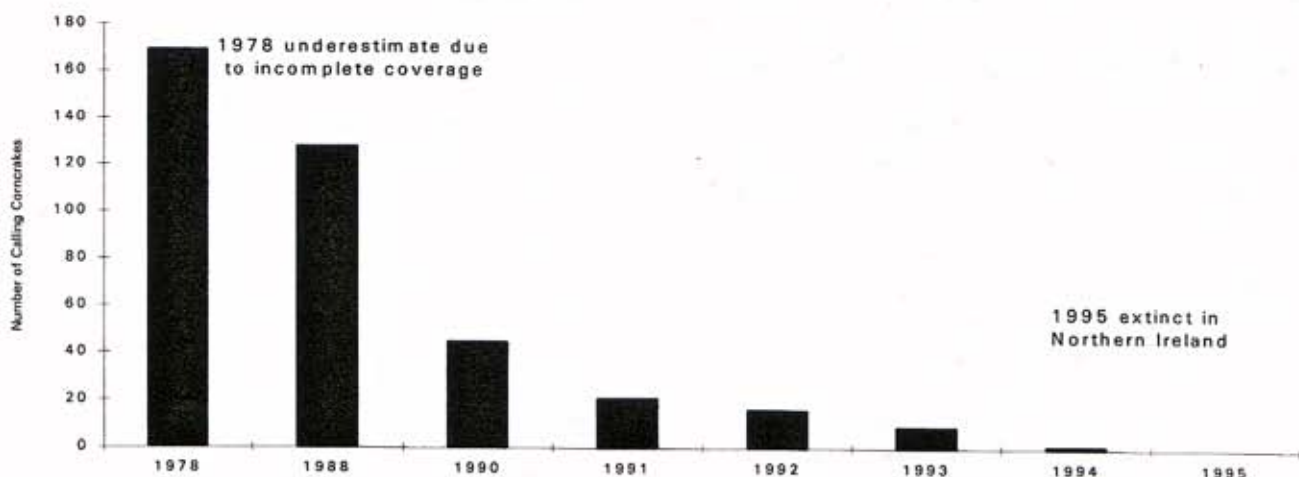
	agriculture (%)	forest area (%)
Northern Ireland	74	5
United Kingdom	76	9
Scotland	75	13
Wales	79	12
Ireland	83	5

Sources Environment and Heritage Service, Belfast.

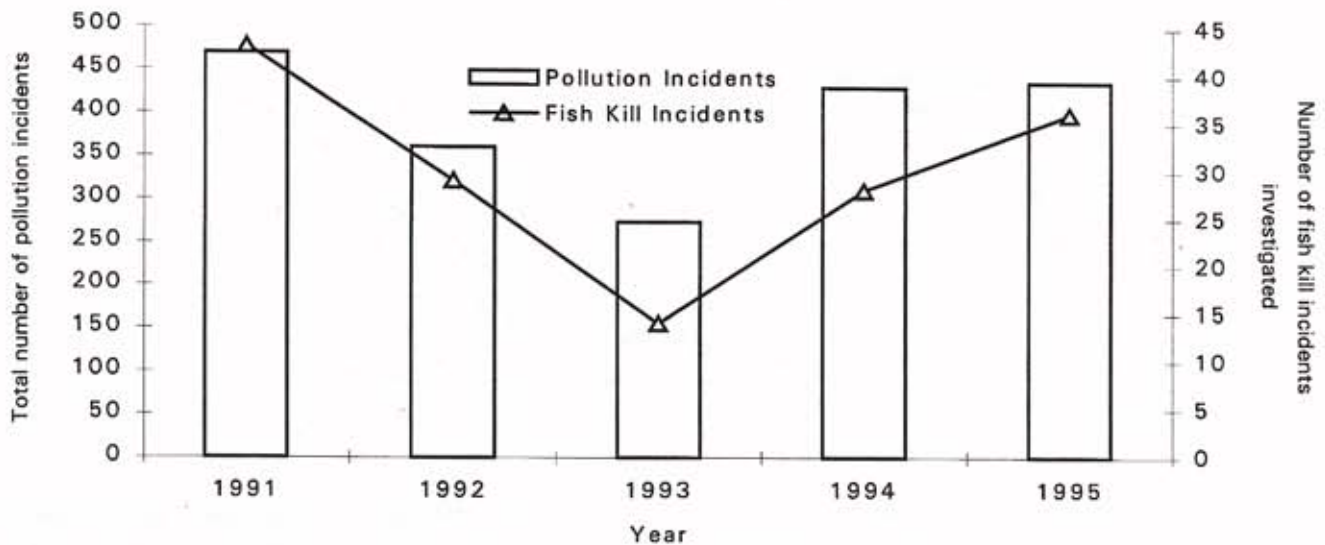
Royal Society for the Protection of Birds (NI Section).

European Environment Agency (1995) "Europe's Environment: The Dobris Assessment", Office for Official Publications of the European Community, Luxembourg.

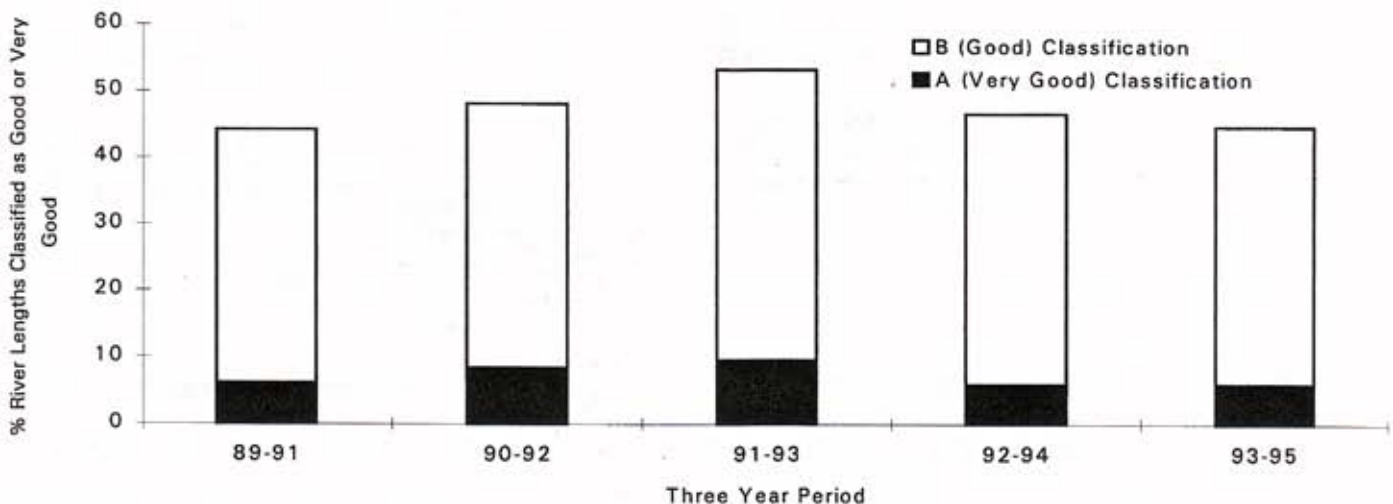
Number of calling Corncrakes in Northern Ireland 1978-1995



Pollution incidents and fish kills in Northern Ireland's rivers



Percentage of rivers in Northern Ireland classified as Good or Very Good (General Quality Assessment)



Description The quality of Northern Ireland's rivers and waterways is influenced by a variety of factors, including sewage discharge, industrial and agricultural pollution incidents and levels of rainfall and water abstraction. The General Quality Assessment (GQA) is one way of gauging the chemical quality, (dissolved oxygen, BOD and ammonia), of rivers using sampling over time. The GQA is defined by the new national Environment Agency. A more localised indicator is a record of pollution incidents and fish kills.

Analysis While it may be possible to explain the slight fall in the number of rivers classified as Good or Very Good since 1993 as a result of a series of hot, dry summers, there is a rise in the number of pollution incidents which cannot be discounted. Most of these recorded pollution incidents (65% in 1995) are from agricultural

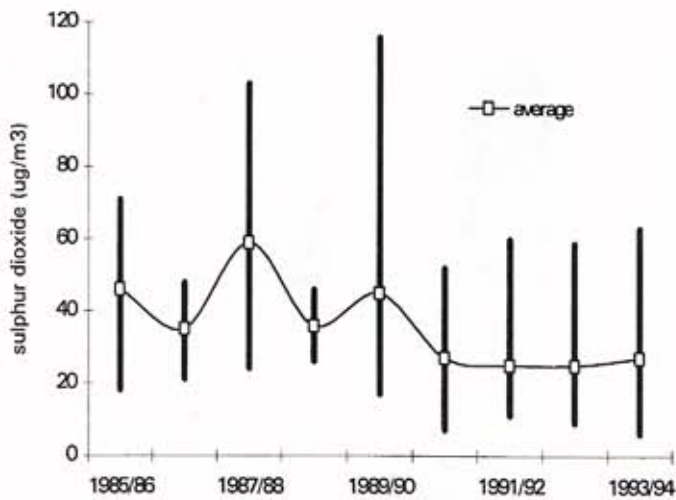
sources but non-agricultural sources tend to be more significant in their impact.

Implications The recent decrease in water quality and the rising number of pollution incidents is a cause for concern. In the last five years the major non-agricultural pollution source was DoE Water Executive sewage works - exempt from criminal prosecution because of Crown Immunity.

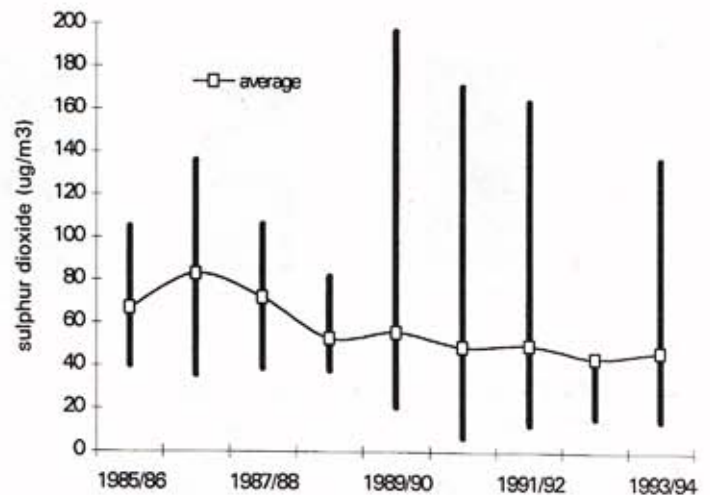
Sources The Fisheries Conservancy Board for Northern Ireland monitors all pollution incidents which involve fish kills. Their annual report provides full details of each incident and gives a useful time series over the past five years. The figures above are taken from the pollution sections of their 1991-95 annual reports. The Fisheries Conservancy Board also undertakes scientific water quality monitoring for the Environment and Heritage Service, and the GQA data is provided by their Water Quality Unit.

Level of air pollution (*selected indicators*) throughout Northern Ireland

Maximum and minimum daily urban concentrations of sulphur dioxide
Summer

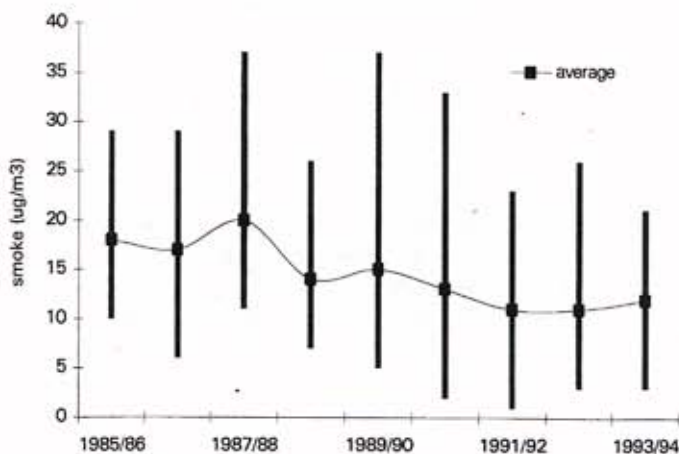


Winter

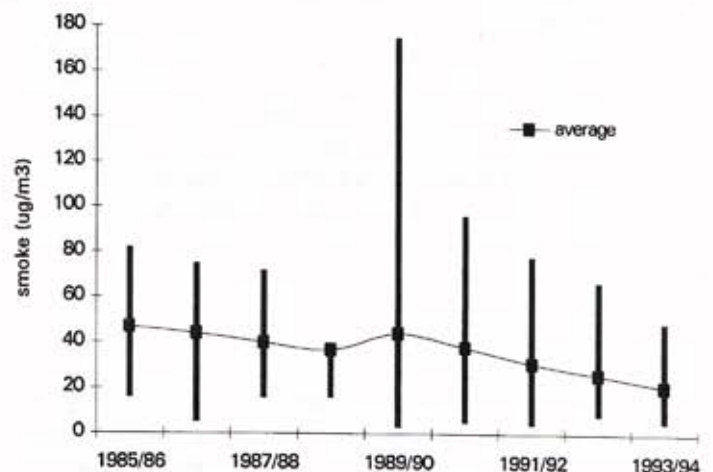


Maximum and minimum daily urban concentrations of smoke

Summer



Winter



Description Poor air quality not only damages the environment but effects human health, the economy and the quality of life. Particulate emissions have been linked to increasing severity of illnesses such as asthma, other respiratory diseases and some forms of cancer. Compounds of nitrogen, sulphur and carbon can contribute to acid rain, and deposition on buildings can result in their physical decay. Acidification of soils and water sources also harms plants and animals.

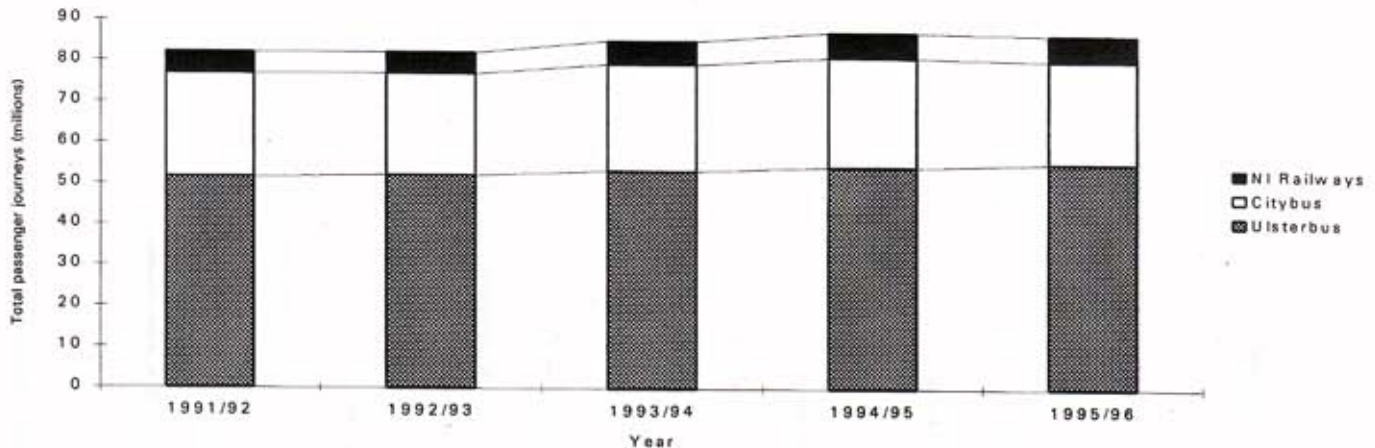
Analysis The levels of air pollution in urban areas in Northern Ireland are declining but remain significantly higher than in other urban areas in the UK. This is especially true of particulate smoke because of our continuing reliance on the use of solid fuel for domestic heating (in Belfast, the concentration of particulates is higher than that of London, Birmingham and Edinburgh combined). The burning of coal in local power

stations and as a domestic fuel are the main local sources of sulphur dioxide. Vehicle emissions are also significant and are now the fastest growing source of all ozone depleting gases and the main source of nitrogen oxides and carbon monoxide.

Implications As natural gas becomes an option for domestic heating and for power stations, we should begin to see improvement in some forms of air pollution and a reduction in the overall level of emissions. Individuals can consider reducing their own impact on all forms of air pollution by improved energy efficiency in the home and using their car less.

Sources Air pollution monitoring at urban sites in Armagh, Belfast, Dunmurry, Londonderry, Newry and Portadown; contained in Northern Ireland Statistics and Research Agency (1997) "Northern Ireland Annual Abstract of Statistics", NISRA, Dept of Finance & Personnel, Belfast.

Level of public transport use in Northern Ireland



Description Transport is possibly the most contentious issue currently being addressed by the environmental lobby. Growth in both the number of vehicles on our roads (over 30% growth over the past 10 years) and the miles travelled have a host of implications for the overall state of Northern Ireland. Cars are being blamed for increasing the severity of respiratory illness and other health problems. They are the cause of traffic jams, road rage and the death or injury of over 11,000 people in Northern Ireland every year. Private vehicles are also a major source of local air pollution and the fastest growing source of greenhouse gases (transport already accounts for 20% of the UK CO₂ emissions and a significant source of NO_x and particulates).

Yet at the same time the motor industry makes a significant contribution to our economy and the increased personal mobility which the car can provide has made many people view their own car as essential. What is clear from official predictions is that demand for road space will increase by up to 44% over the next 15 years, making it impossible for even the most ambitious road-building programme to meet demand. Many national journey times have doubled in the past 10 years alone. This has been recognised by the Government who are looking at alternatives to the private car - particularly increased use of public transport.

Analysis The total number of passenger journeys by public transport in Northern Ireland has remained fairly constant with only a slight increase over the past five years. We do not know what percentage of total journeys are made locally by public transport (at the national level only 11% of passenger kilometres are made by bus and train compared to 86% by car). Journeys by walking or cycling are poorly recorded.

Implications The emphasis being given to more sustainable forms of transport will have

implications for social equity and access. Increased car ownership can lead to a reduction in the demand for public transport which can have a disproportionate effect on women (only 41% of adult women have a driving license compared to 74% of adult men), the retired, the young and the low paid. All these groups also have higher than average mortality rates due to road accidents, especially as pedestrians.

People should use their cars less and change to a more convenient, attractive and affordable public transport alternative, cycle or walk for short journeys. Investment in new rail infrastructure, bus stations, park 'n' ride schemes in our urban areas, and increased parking charges will all be important in an integrated package of measures to promote public transport. Increasing the costs of car transport through taxation (table below) could help to make public transport more popular. Facilities for cycling should also be provided.

Annual costs of urban commuting by car (AA, ABI, FoE)

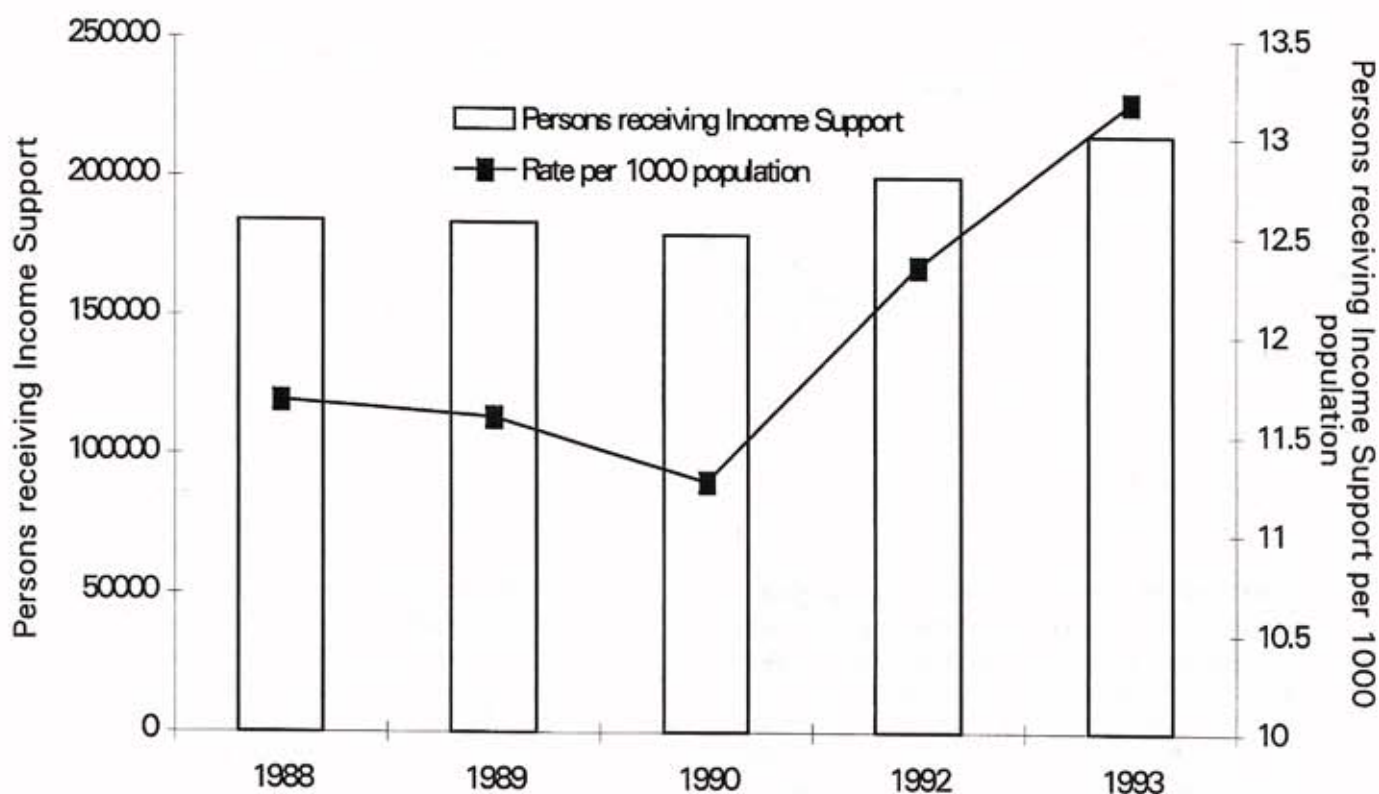
	1997 (£)	2002 (£)
Fuel	785	1,570
Road Tolls	0	2,000
Vehicle Excise Duty	140	280
Insurance	376	425
Total	1,301	4,275

Ultimately it is down to individuals to decide how they will travel based on the true economic and environmental costs of motoring. If motorists prove unwilling to change their ways, it is inevitable that the Government will take tougher action to try to persuade them.

Sources Department of the Environment for NI (1996) "Transport Statistics 1995", Central Statistics and Research Branch, DoE (NI), Belfast.

Commuting costs and projected figures were made by the Automobile Association (AA), the Association of British Insurers (ABI), and Friends of the Earth (FoE).

People living on income support in Northern Ireland



Description In a sustainable economy everyone should have an income adequate to meet their needs and income should be more fairly distributed between individuals, areas and different sections of the community.

At the global scale, 1.3 billion people are living on less than \$1 a day and over 100 million individuals in the developed world are living below the poverty line. Locally there are also problems of poverty and disparity between different areas of Northern Ireland.

Analysis This indicator highlights the fact that for many people their income is inadequate to meet their needs. The European Union defines 'poverty' as people living on less than 50% of average income. However, in the UK there is no official 'poverty line'. This indicator is simply an estimation of those people who are living in poverty; notionally defined as those people who need supplements to their income. The above figures show an increase in poverty where both the number and rate per 1000 population of those people receiving Income Support has risen in recent years.

It is also clear that the incidence of poverty is concentrated in certain areas of Northern Ireland. There is a geographical concentration of poverty and deprivation in Belfast city and in the

peripheral areas of the west, south and north-east (of the ten most deprived wards throughout Northern Ireland, six are in inner Belfast, three are in Derry and one in Strabane), while the greater Belfast City Region and the more rural areas of the east have the lowest levels of deprivation.

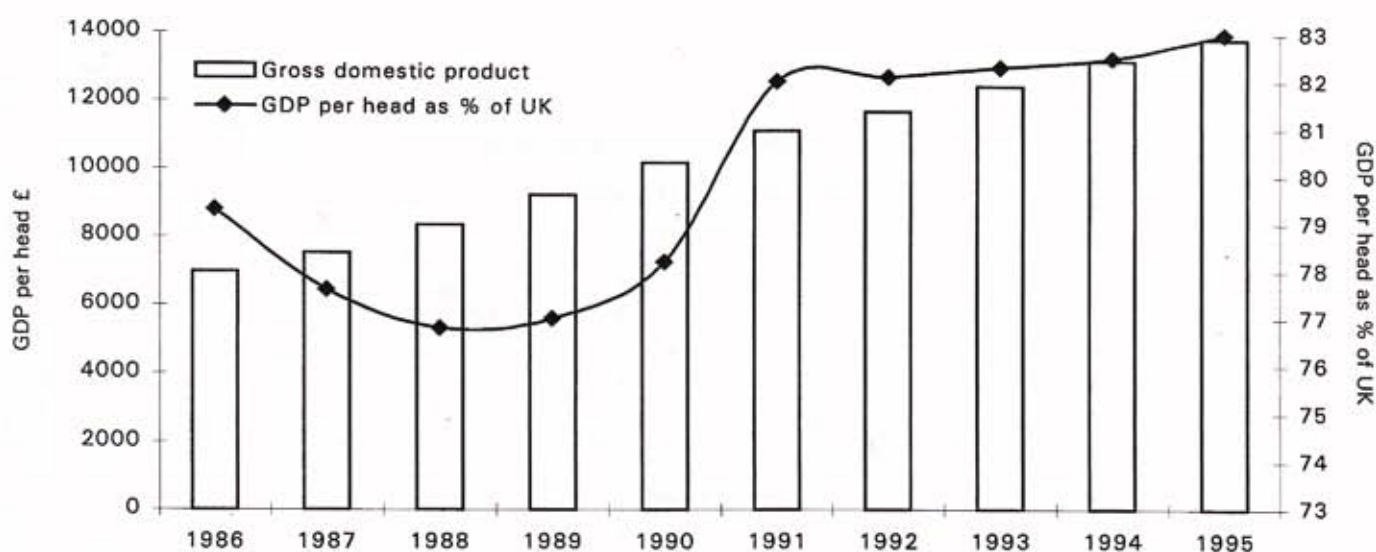
Implications There are strong links between poverty and poor health, inadequate housing, petty crime and poor environmental quality. Where more people are becoming dependent on income support from the state there will be a multitude of negative effects on society as a whole.

The problems of increasing poverty and inequitable income distribution have no easy answers. Many of the local problems we have today are a result of historical development or physical remoteness. We need to understand these problems and the factors which influence poverty, looking at ways of addressing these issues by investment in education, skills training and by real improvements to the physical environment.

Sources Global figures from United Nations (1997) "The Human Development Report", Oxford University Press.

Local figures from Dept of Health & Social Services for NI.

Gross Domestic Product as % of UK level



Description Gross Domestic Product is a macroeconomic indicator of the speed at which the economy is expanding. If regional economic growth is sustained over time then there should be positive benefits to the standard of living within Northern Ireland as it effects our levels of disposable income. It is stated government policy "to promote sustained economic growth and rising prosperity".

Analysis Investigating the comparative levels of GDP we can see that there is not only a question of prosperity but one of equity between different European regions and between Northern Ireland and the rest of the United Kingdom.

Comparative European Gross Domestic Product 1994

	at current prices (bn ECU)	per inhabitant (1000 ECU)
Germany	1724.8	21.1
France	1121.9	19.5
Italy	863.2	14.8
UK	856.6	14.7
Ireland	44.5	12.5
Northern Ireland	n/a	12.1
Spain	407.1	10.4
Greece	80.3	7.7
Portugal	73.9	7.5

The GDP for Northern Ireland has been growing at a steady rate over the last ten years, and since the end of the 1980s the gap has been closing between here and the rest of the UK (GDP per head rose by 3% in NI compared to 2.5% in the UK as a whole). However, there is still a substantial disparity between the national economic prosperity and that of Northern Ireland; we are still one of the poorest regions of the UK.

Implications GDP is useful in showing the general economic background against which the

overall sustainability of the region can be assessed. GDP is an over-simplified indicator and it is not always clear why the economy is growing and what environmental impacts this may ultimately have. A growth in GDP is not always a good thing for the environment. Increasing levels of production and consumption can use up scarce natural resources at unsustainable rates and increase the levels of pollution and waste. For these reasons it is best to examine the GDP indicator in conjunction with the complete range of environmental and social measures.

It must be remembered that GDP is only an economic indicator and not a measure of 'quality of life' or happiness. Ideally, in the future it will be possible to have a measure of a 'green economy' (such as the Index of Sustainable Economic Welfare produced by the New Economics Foundation) which takes full account of environmental impacts, both positive and negative, recognising that economic growth and a healthy environment are interdependent.

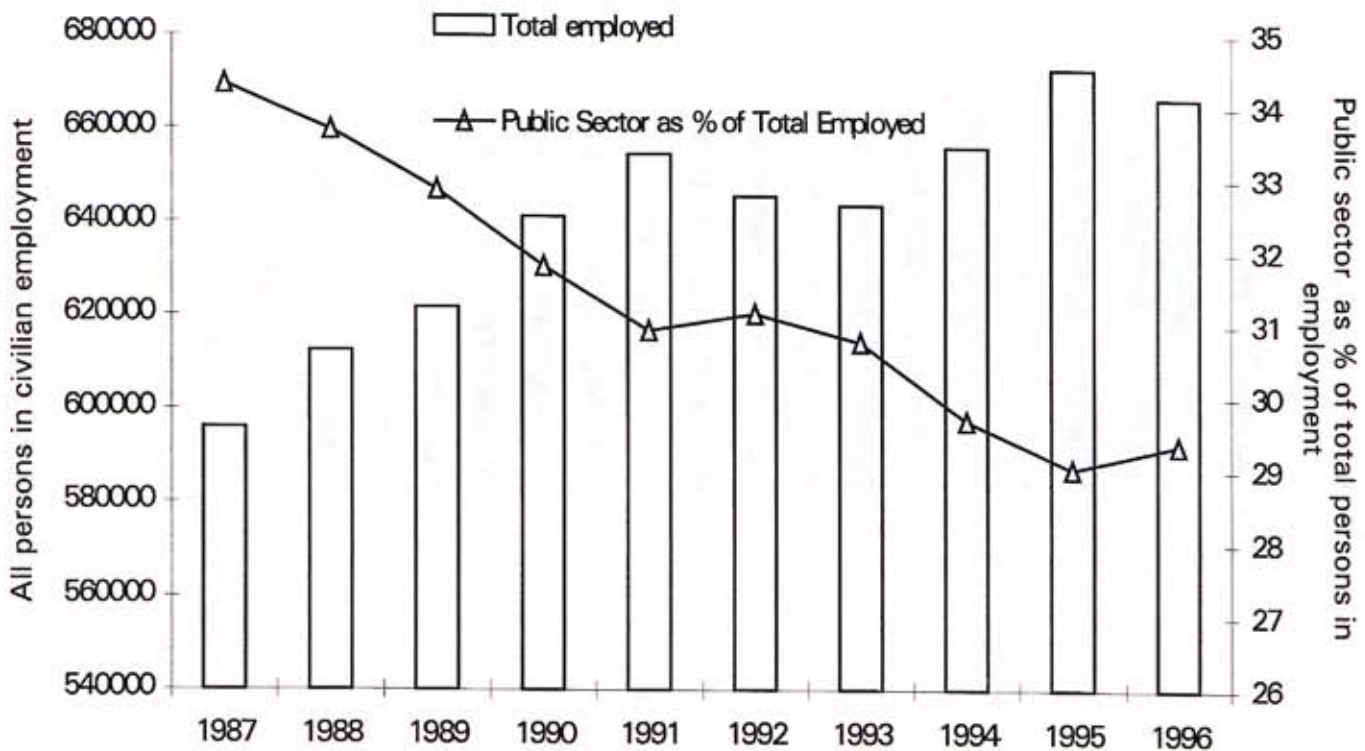
GDP is forecast to continue to grow at around 3% this year (compared to 2.2% for the UK and 5% for the Republic of Ireland) and 3.5% in 1998, with growth across industrial, retailing, financial services and commercial sectors of the economy. This future growth will depend on many environmental and social factors, not least any progress made in the peace process and in the continuing BSE crisis effecting the local agricultural sector.

Sources Office for National Statistics, London.

Eurostat, Statistical Office of the European Communities.

The Northern Ireland Monitor Yearbook 1997.

Percentage of Northern Ireland workforce in the public sector



Description The structure of the local economy - the range and level of activities undertaken - has a considerable potential impact on the natural environment and on the welfare of the community. Likewise, the relative size and activity of the various sectors of the economy can also make us aware of long-term trends and any potential problems. Throughout the UK and other western European countries over the last 20 years there has been a decline in heavy industry and manufacturing, with a subsequent growth in high technology industry and the service sector. Consequently, Northern Ireland has undoubtedly suffered disproportionately because of an historical reliance on the declining manufacturing sectors.

A future sustainable economy would be one where there is a greater diversity in the range of activities undertaken and thus where the overall economy is less vulnerable to dramatic change in any individual sector of the economy. This would mean a move away from a cyclical 'boom-bust' economy (one characterised by sudden and unpredictable changes) to a steady state economy where structural changes in the economy are properly managed to avoid high price rises and periods of high unemployment.

One current issue facing the structure of Northern Ireland's economy is an over dependency on the role of public sector activity, including employment provision. The figures show the

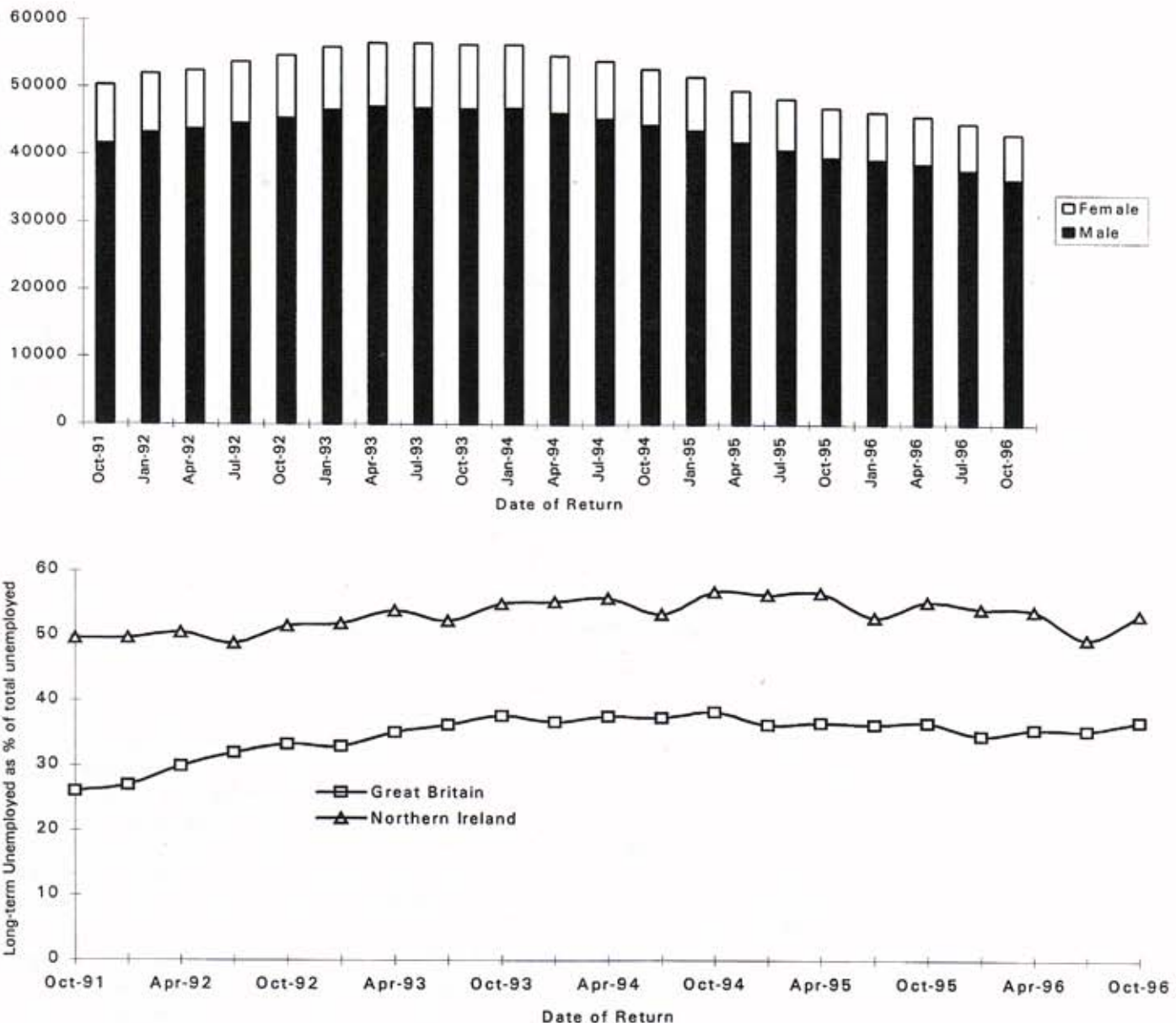
trend in the level of public sector employment. This is separate from those employed in the security forces which, if they were also included, would significantly increase the percentage of those employed by the public sector. In addition to those directly employed there are also those businesses which rely on the public sector for work, everything from construction to catering.

Analysis The observable trend over the last ten years has been a steady decline in the percentage of the workforce employed by the public sector without any distinct effect on the total number of people in employment. However, there is still almost one in three of the workforce directly dependent on the public sector, making the entire economy vulnerable to changes in this particular sector.

Implications A regional economy structured in this way leaves itself vulnerable to sudden changes in Government policy and budgets. There is also the unpredictable effect of political progress. One way to increase economic diversity would be to have job growth in environmental services and products and to invest in the key growth area of high technology industries. Ultimately this will depend on the education and skills of the local workforce and the attractiveness of Northern Ireland to investors and new industries.

Source Statistics Branch of the Department of Economic Development, Belfast.

Level of long-term unemployment in Northern Ireland



Description In a sustainable and diverse economy there will be opportunities for everyone to undertake satisfying work. Beneficial employment is good for both the individual and society, meeting a basic need in providing personal incomes and empowerment to make financial decisions.

Our economy has a growing emphasis on a flexible labour market which expects people to be flexible in their training and more mobile in their search for work. There is also a growth in part-time working, short-term contracts and having more than one job. This will mean there will often be periods where people are between jobs when they are unemployed and seeking work. Long-term unemployment (the total number of people out of work and claiming Social Security - unemployment benefit, income support and

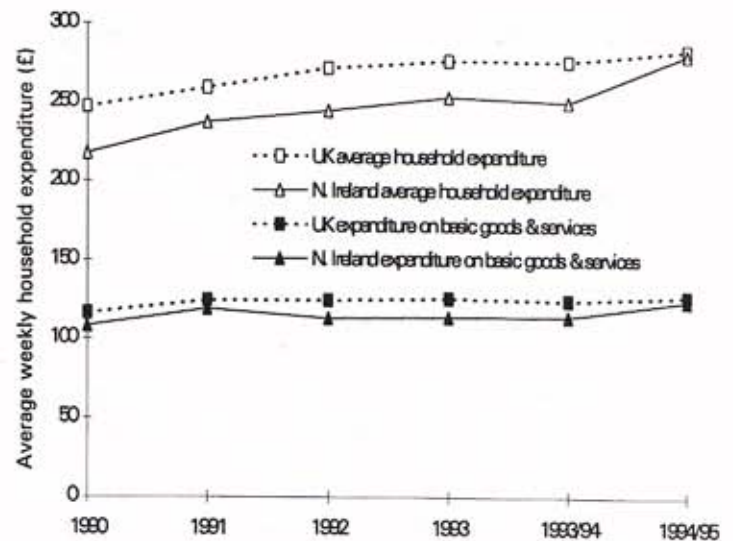
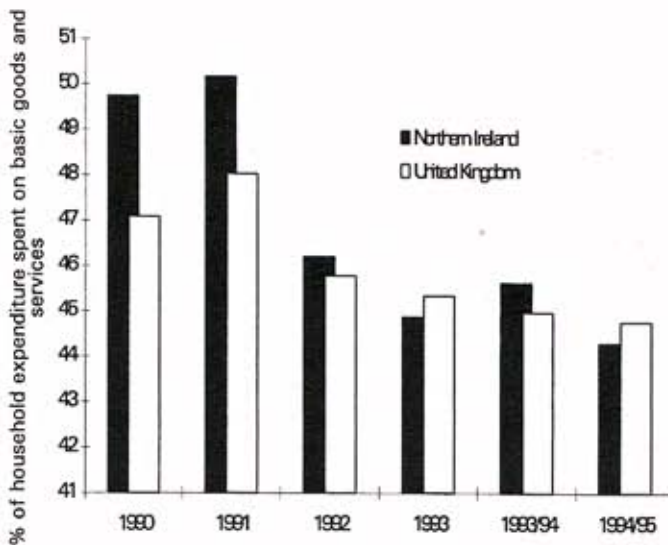
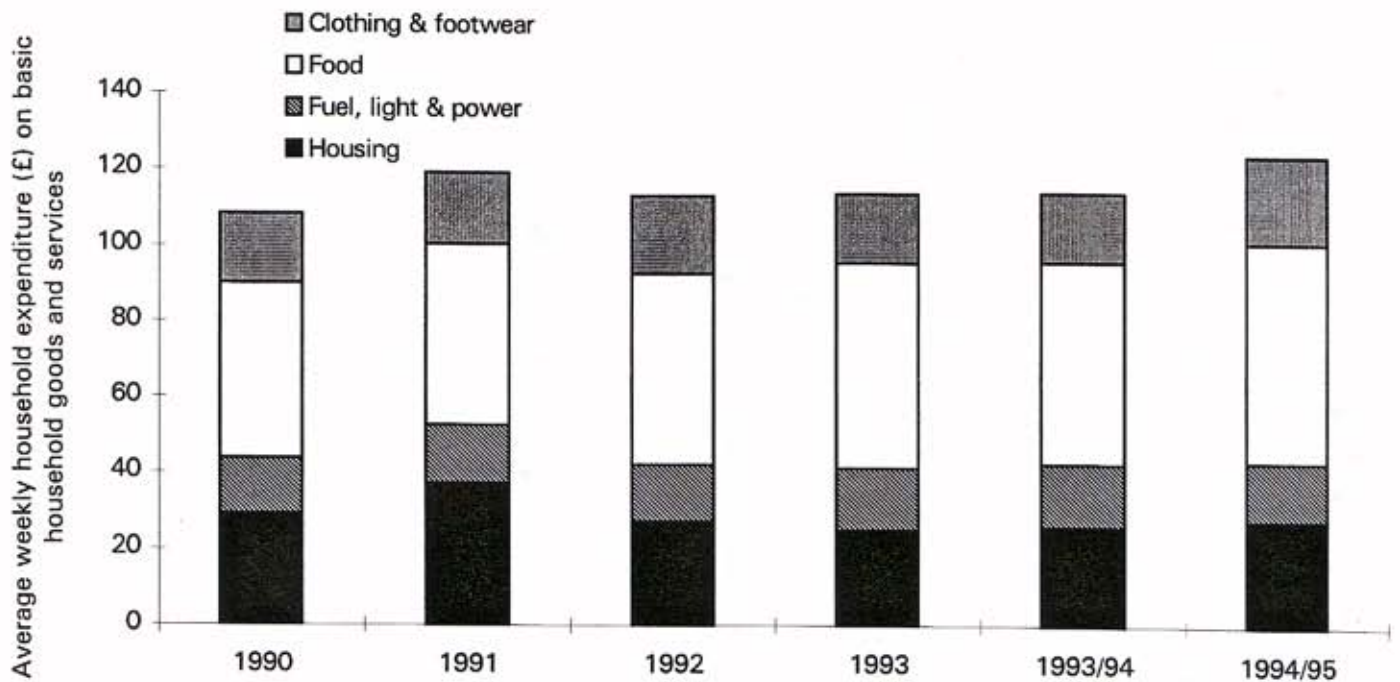
national insurance credits - for over 52 weeks) takes account of such factors.

Analysis The figures show that while there has been a slight fall since the end of 1993, there is still a significant problem. Over 45,000 people in Northern Ireland have been out of work for over 1 year (50% of the total level of unemployment - compared to around 30% for Great Britain).

Implications Unemployment levels are closely linked to trends in poverty and low income. Education has a marked influence on unemployment. Unskilled and unqualified individuals are less likely to find employment and more likely to be long-term unemployed.

Source Department of Economic Development, Belfast.

% of household expenditure spent on basic goods and services



Description Family or household expenditure is one way of measuring the real benefits of a healthy economy. As an indicator, it can also show changing patterns of consumption and reflect a changing environmental impact.

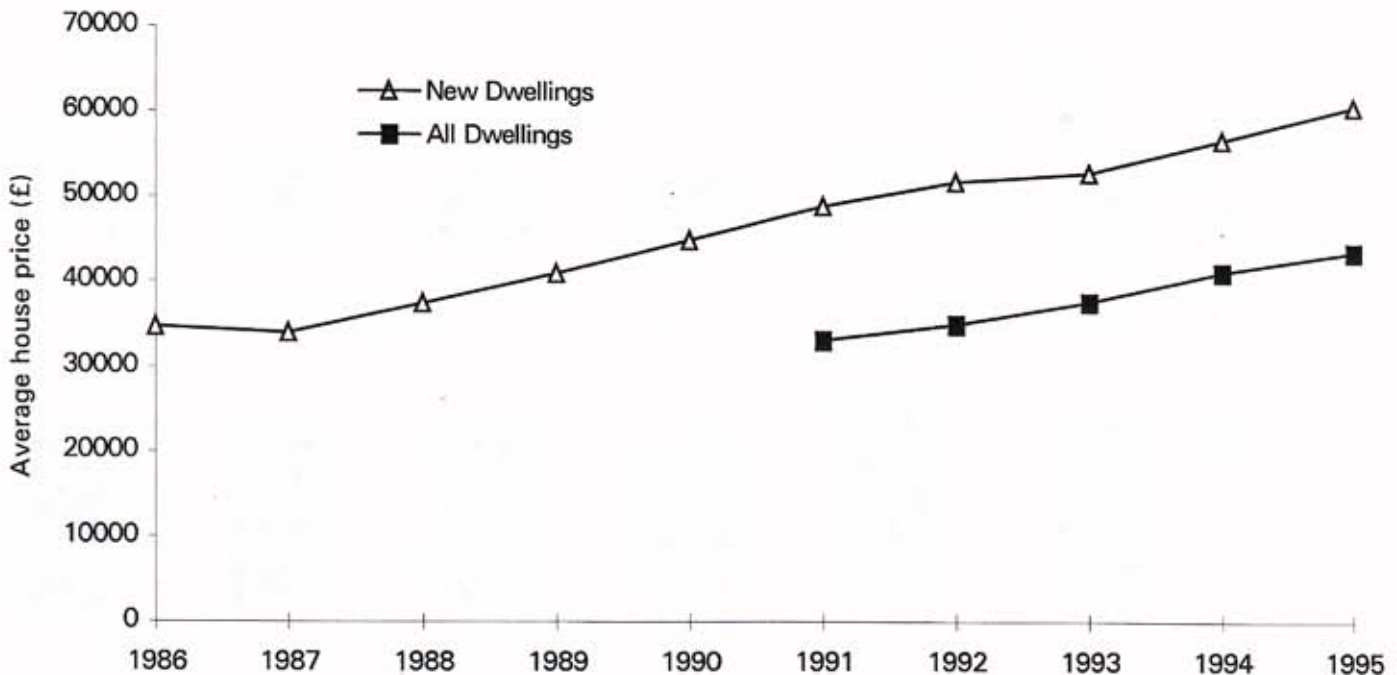
Analysis Over the past five years the local average weekly household expenditure has risen steadily and consistently with an improving national economy. In 1995, for the first time, average household expenditure in Northern Ireland matched that of the United Kingdom as a whole. Also, over the last five years the percentage of expenditure put towards basic or essential services (notionally defined as shelter, heat, light, food and clothing) has fallen from 50% to 44% and is similar in level to that of the UK as a whole. A major factor in this is the

significantly lower cost of housing in Northern Ireland, but set against this is the higher expenditure on food and drink. Some of the trends may also be a result of changing demographics as household sizes become smaller.

Implications Overall the changes are long-term improvements in consumer choice, where more disposable income is available for luxury or non-essential goods and services, helping to improve the quality of life for individuals. With more spending power we need to be careful we choose products which are not damaging to the environment.

Sources Northern Ireland Statistics and Research Agency (1996) "The Northern Ireland Family Expenditure Survey: (Reports for various years)", NISRA, Department of Finance and Personnel, Belfast.

Average house prices throughout Northern Ireland



Description Within a sustainable economy everyone should have access to a good standard of accommodation at a reasonable cost.

The house price index is a useful indicator of change within the housing market and a measure of affordable accommodation. The long-term trends within the housing market also reflect changes in the overall economy and investors' confidence in property.

Analysis House prices in Northern Ireland have traditionally been lower than in the rest of the UK, and over the last ten years they have risen at a slower rate. As a consequence we have to-date avoided the worst of the recessionary housing 'bust' which followed the 1980's 'boom'. Negative equity (where the value of a person's home is less than the price they paid for the property) is still common through the south-east of England but is virtually non-existent in Northern Ireland.

The figures suggest that the local housing market is more stable than the rest of the UK and that there is a consistent level of modest growth in house prices. In 1996 property prices rose faster here than in any other part of the UK, due largely to the improving local economy and renewed confidence in the peace process.

Implications The provision of affordable housing affects everyone, not just those people living on low incomes. It influences the overall level of home ownership, housing choice and

tenure throughout Northern Ireland. It also influences the level of household expenditure and has a knock-on effect for the whole economy.

It has recently been suggested that a high level of home ownership (as compared to public housing or people renting privately) will have an influence over the local levels of unemployment. Within an economy where people are increasingly expected to be more flexible in their job skills and mobile in the location of their work, overly high levels of home ownership or negative equity in the private housing market can make the workforce less mobile in their search for employment.

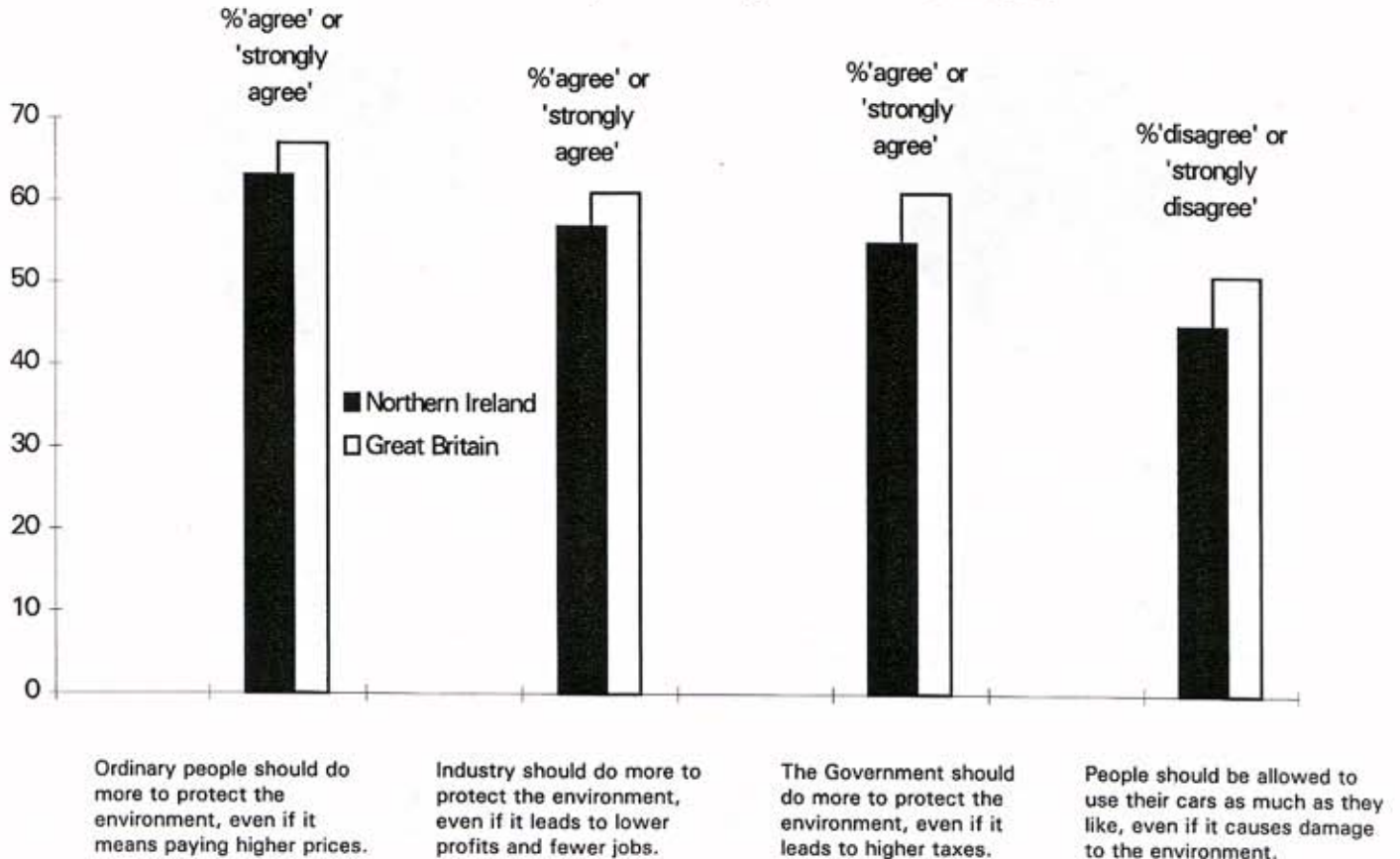
Thus, while the private housing sector remains extremely healthy and affordable (first time buyers spend an average of 11.2% of their income on initial mortgage repayments compared to 13.8% in the UK as a whole), there is some concern that this may cause an imbalance in the lack of tenure choice and fewer homes available for rent; an imbalance that will have a disproportionate effect on lower income families and others who cannot afford to buy.

Sources Department of the Environment for NI (1996) "Northern Ireland Housing Statistics 1995", Central Statistics and Research Branch, DoE(NI), Belfast.

University of Ulster (1997) "Northern Ireland Housing Market: A 10 Year Perspective", University of Ulster, Newtownabbey.

NI Housing Executive (1996) "Review of the Northern Ireland Housing Market 1997/98 - 1999/2000", NIHE, Belfast.

Public attitudes to the cost of protecting the environment



Description It is estimated that at a global level humanity uses free natural resources worth a total of £20.7 trillion every year. This is through the exploitation of oxygen, metals and minerals and the services of natural irrigation, pollution and waste disposal. In total it is twice the value of the global GDP and illustrates how dependent our world economic system is upon nature and how we have failed to appreciate its true value - possibly until it is too late. We should all begin to give the environment the weighting it deserves in any major decision making process. Yet at a personal level many people are often just not prepared to pay for protecting the environment.

Analysis There is a gap between the number of people who say they care for the environment and are worried about the effects of traffic congestion, atmospheric quality and noise (86% in Northern Ireland and 96% in GB), and the number of people who are prepared to pay more in terms of direct costs or additional taxation to actually protect the environment. As the above graph shows, only 55% of people in Northern Ireland are prepared to pay higher taxes to protect the environment with the comparative figure for GB of 61%. This shows that not only is there a disparity between what people in Northern Ireland value and what they are prepared to pay for, but there is also a significant and consistent difference between the opinions

of people here compared to those in GB, with those in GB being more prepared to 'put their money where their mouth is' when protecting the environment. Similarly, there are even fewer people who are prepared to sacrifice what they see as a right to use their cars no matter what environmental damage it may cause. It seems that any measures to curb the use of the private car are likely to be extremely unpopular.

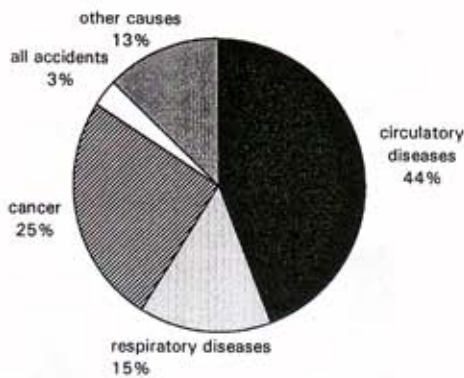
Implications While recognising that there are legitimate reasons why many people feel their own car use is essential (due to disability, living in remote areas or related to employment) there should be a clear cause for concern due to the results of this indicator. People are still undervaluing the environment.

One solution may be the introduction of more non-discriminatory 'green taxes'. A change of attitude is also required where we not only become aware of our own impact on the environment but are willing to accept that the principle of the 'polluter pays' applies to all of us.

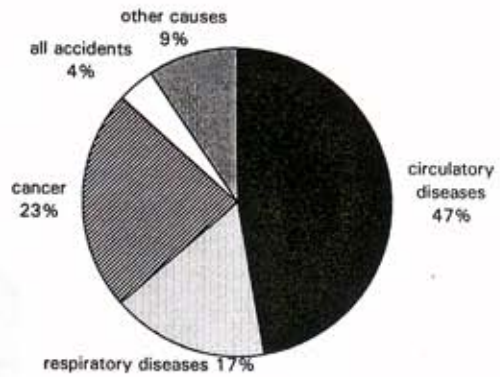
Sources Bryson I, Devine P and Dowds L (1997) 'Transport in Northern Ireland: Finding the Way Forward' pp. 138-152 in Dowds L, Devine P and Breen R (eds) "Social Attitudes in Northern Ireland: The Sixth Report". Appletree Press, Belfast.

Global economic figures kindly supplied from research by the University of Maryland, USA.

General mortality rates



UK mortality: 1,067 per 100,000 population



NI mortality: 1,165 per 100,000 population

Description An important principle of sustainable development and social equity is the ability of everyone to enjoy the best possible health.

Mortality rates have traditionally been used as indicators of the general health of a local population. Mortality is measured in number of deaths per 100,000 population. The measure reflects the incidence of a range of fatal conditions such as heart disease and cancer. The specific indicator of infant mortality rates (death rates of children under one year old per 1000 live births) is an additional measure which can reflect wider problems of poor infant and maternal health and nutrition.

Poor health can be linked to our economic situation and in turn to poverty and unemployment. It is also important to be aware of the interaction of the local environment and public health. Respiratory illness is linked to the levels of air pollution and some forms of cancer have been linked to vehicle emissions and exposure to other chemicals in the environment.

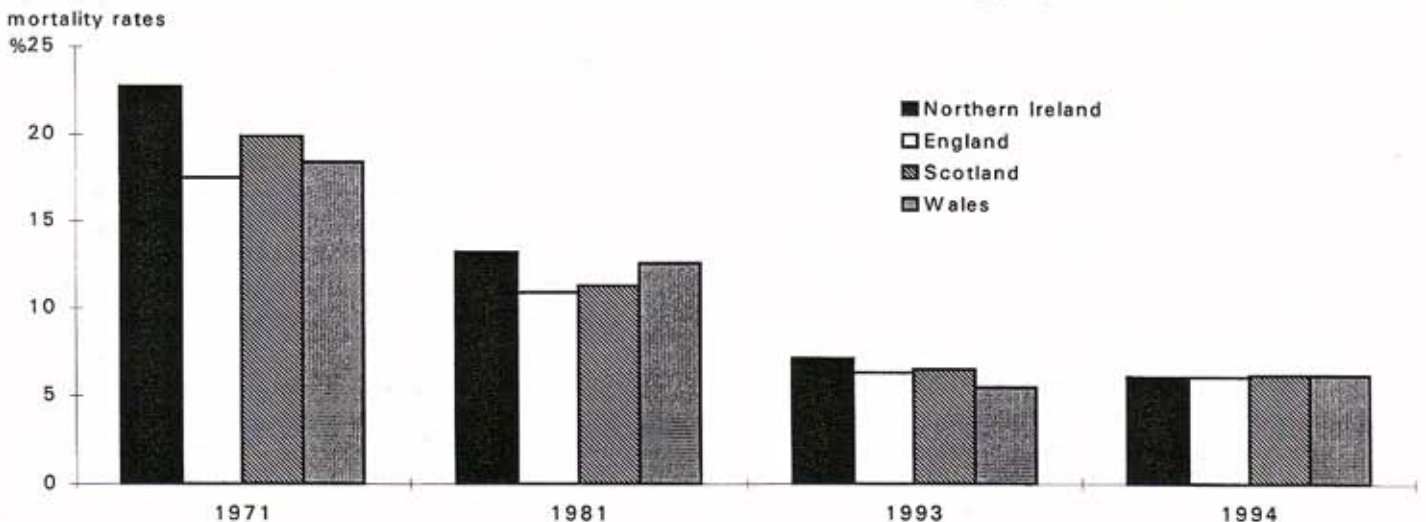
Analysis The infant mortality rate has declined more rapidly in Northern Ireland since 1971 than in any other part of the UK, and is now equal to other regions. However, the general mortality rate is still significantly higher locally (1165 compared to 1067 per 100,000 population) than in the UK as a whole, with higher levels of both heart and respiratory diseases in Northern Ireland.

Implications Overall standards of public health need to be improved and the inequalities that exist between different social groups should be a priority for action. Health should not be looked at in isolation. We need to recognise that by tackling problems of inequality and promoting a cleaner, less polluted environment there will be real benefits for public health.

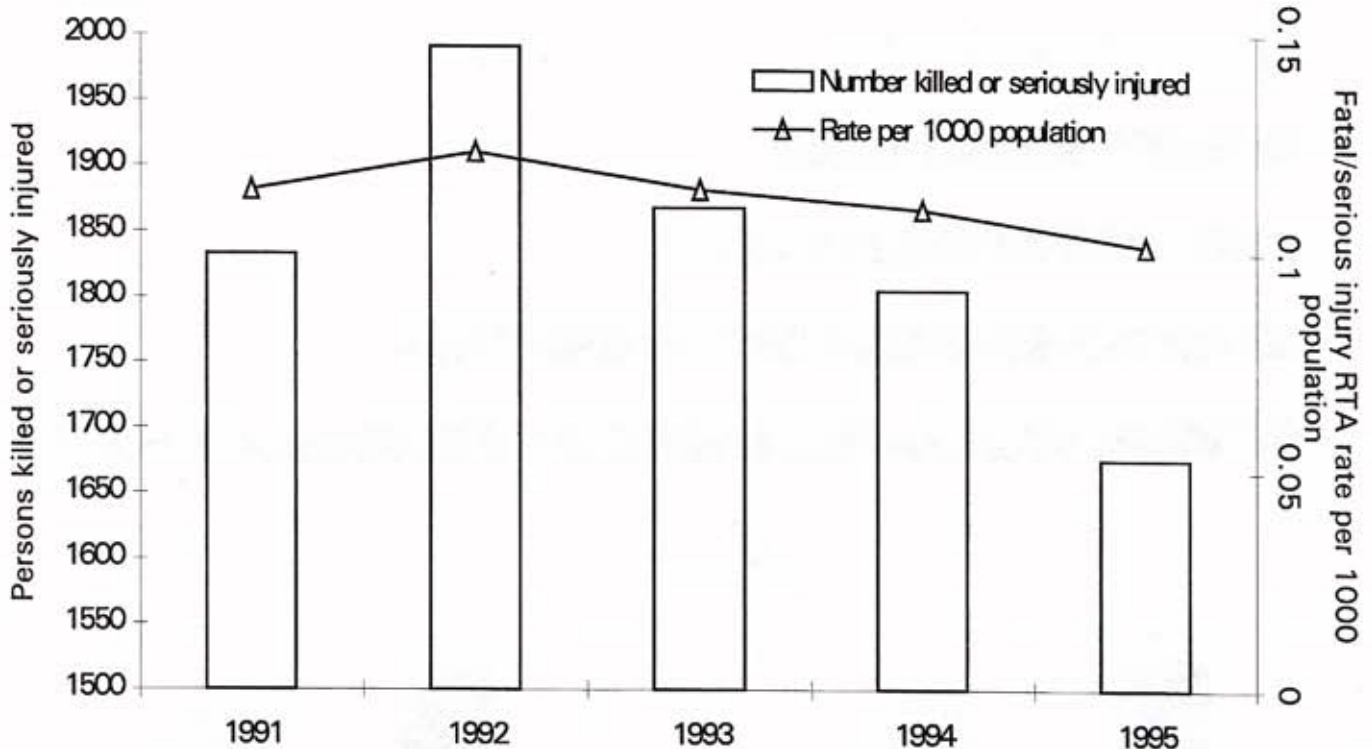
Sources Office for National Statistics (1996) "Regional Trends 31", HMSO, London.

Office for National Statistics (1997) "Social Trends 27", HMSO, London.

Infant mortality (deaths of infants under 1 year of age per 1,000 live births)



Number of fatal and serious injury road traffic accidents in Northern Ireland



Description A sustainable environment is a safe environment where people are protected from death or injury on the roads. This is not the case locally. Northern Ireland's roads have claimed more lives than terrorist violence and continue to claim lives every year.

There was such concern over the high levels of death and injury on our roads that in 1989 the Government set a target to "reduce the total number of people killed and seriously injured on Northern Ireland roads by one-third by the year 2000". This reduction is based on the average number of casualties between 1981-85 and it is similar to targets set in Great Britain. The Road Traffic Accident (RTA) figure is the sum of persons killed or seriously injured, taken from the total number of recorded road traffic injury accidents and casualties in Northern Ireland.

Analysis The graph above illustrates our progress in reducing the number of fatal and serious injury accidents on our roads. Hidden in the figures is the vulnerability of pedestrians and cyclists who make up a third of all casualties on the roads. There is also a disproportionate level of young and elderly people who are victims of traffic accidents.

What we cannot gauge from any existing indicator is to what extent excessive levels of traffic actually discourage people from walking or cycling - 'unsafe' roads tend to make people get

into their car and drive even short distances. This is especially noticeable in the increase in car journeys as part of the 'school run'.

Implications While action is being taken to publicise road safety in the media (targeting speeding and drink-driving), and road engineering/traffic calming schemes are being carried out in problem areas, there is little official acknowledgement of the part that traffic reduction and encouraging other transport modes could play in cutting accidents.

Individual road users should demand more radical action and lobby for change, safe cycle routes to schools, more pedestrian areas in town centres, and better public transport for all. It is the responsibility of every motorist to use the car less (especially for short trips), to think about other more vulnerable road users and accept that restrictions on the use of the car will become more common in the future.

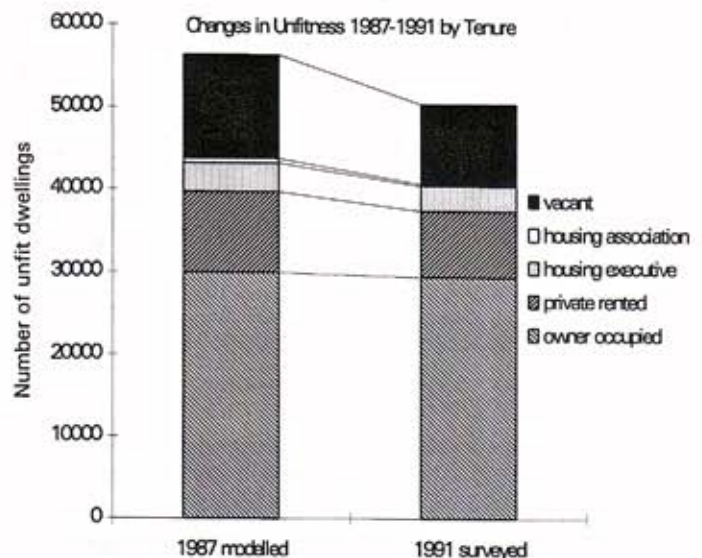
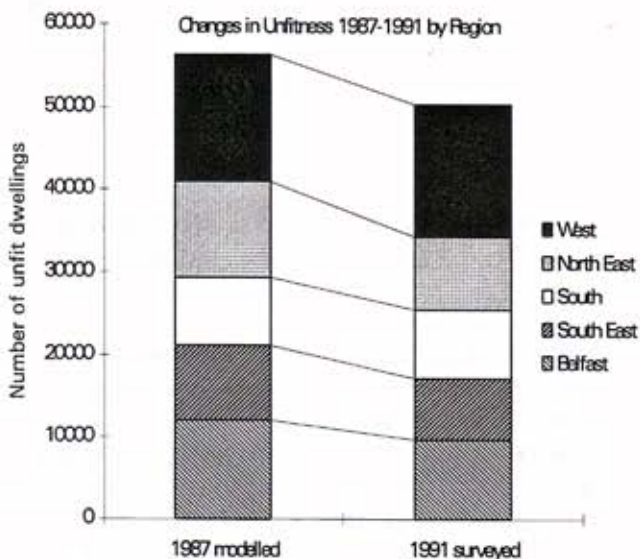
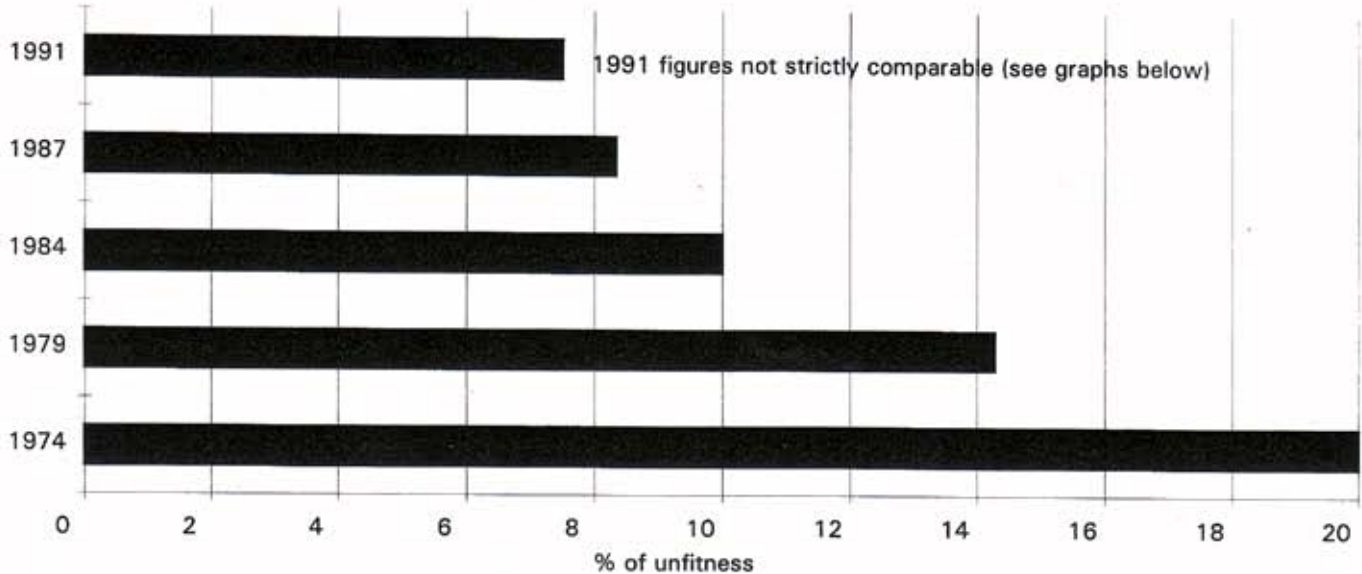
Sources RTA data provided by the Central Statistics Unit of the Royal Ulster Constabulary, Belfast.

Rate per 1000 population is calculated using mid-year population estimates by Northern Ireland Statistics and Research Agency, Department of Finance & Personnel, Belfast.

Details of the NI accident reduction target can be found in Department of the Environment for NI / DHSS / RUC (1995) "Road Safety Plan for Northern Ireland 1995/96 - 1997/98", Department of the Environment (NI), Belfast.

Percentage of the Northern Ireland population living in unfit dwellings

Housing Unfitness 1974-1991



Description Meeting the basic need for adequate and affordable accommodation is an essential aspect of moving towards a sustainable society. Over the last 25 years there has been a considerable improvement to the quality of the housing stock throughout Northern Ireland. This is largely due to the work of the Northern Ireland Housing Executive, the body with statutory responsibility for meeting housing need.

Analysis We can observe a consistent improvement to the housing stock which today leaves Northern Ireland with a comparable figure to the rest of the UK (7.5% of unfit housing stock in NI compared to 6% for UK). However, with room for further improvement there should be no complacency. Future improvements should perhaps target those areas which suffer excessive levels of unfit housing, particularly west of the River Bann.

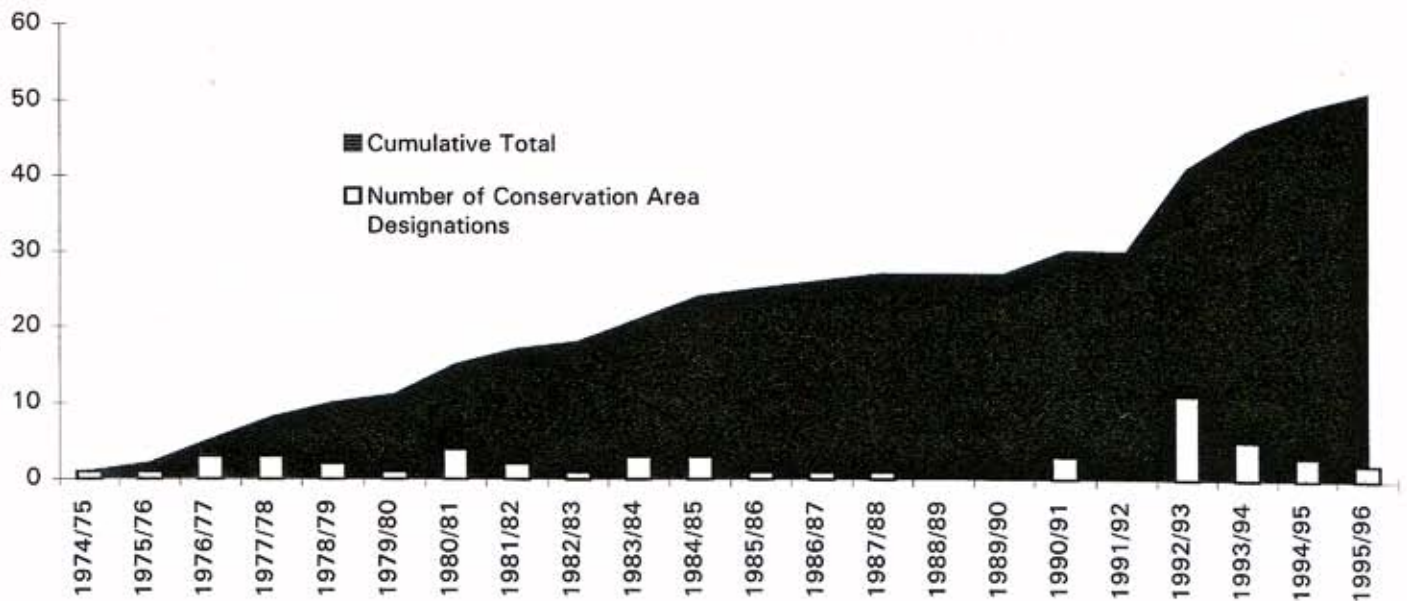
Implications The 1991 figures show that not only are there variations among different regions but that the physical problem now lies primarily with owner-occupied and private rented properties. The causes of unfitness are no longer mis-management, poor design and bad maintenance of public housing but low incomes of some home owners and poor maintenance by certain private landlords

Sources A summary of the earliest housing condition surveys (1974-1987) can be found in; Maginnis I (1991) "Brick by Brick: A short history of the Northern Ireland Housing Executive", NI Housing Executive, Belfast.

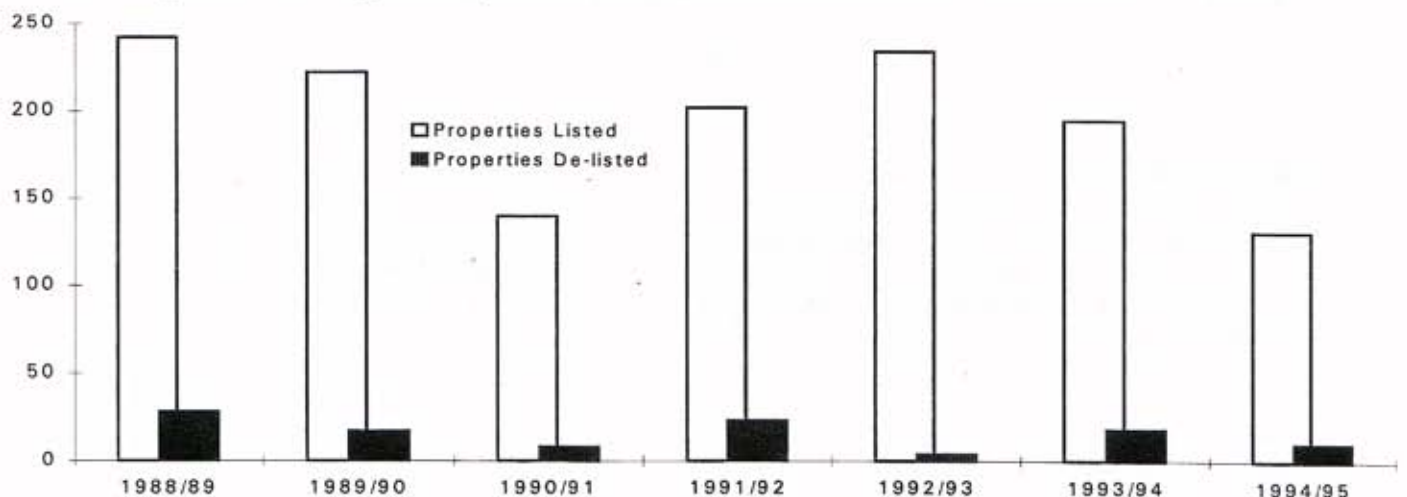
NI Housing Executive (1993) "Northern Ireland House Condition Survey 1991", Research Unit, Housing and Planning Division, Northern Ireland Housing Executive, Belfast.

NI Housing Executive (1996) "Annual Report Number 25: 01 April 1995 to 31 March 1996", Northern Ireland Housing Executive, Belfast.

Conservation Area Designations in Northern Ireland



Listing of Buildings of Special Architectural or Historic Interest



Description Sustainable development is about improving people's quality of life, partly by ensuring the places, buildings and objects we value are protected and that settlements are 'attractive' in scale and design.

Analysis The selected indicators show the ongoing designation of conservation areas and listing of important buildings, giving statutory protection to our places of quality and value to our distinctive local areas. Enhancement measures are often combined with designation, and physical improvements ensure that these buildings and places are not put at risk.

Implications It is slightly worrying to note that while continuing protection is given to our more special areas, there is very little emphasis on quality or human scale within the rest of our built environment. One indication of this is the priority and extent of space dedicated to private

transport (shown in table below) compared to the rest of the British Isles.

Road & Transport Density for Northern Ireland

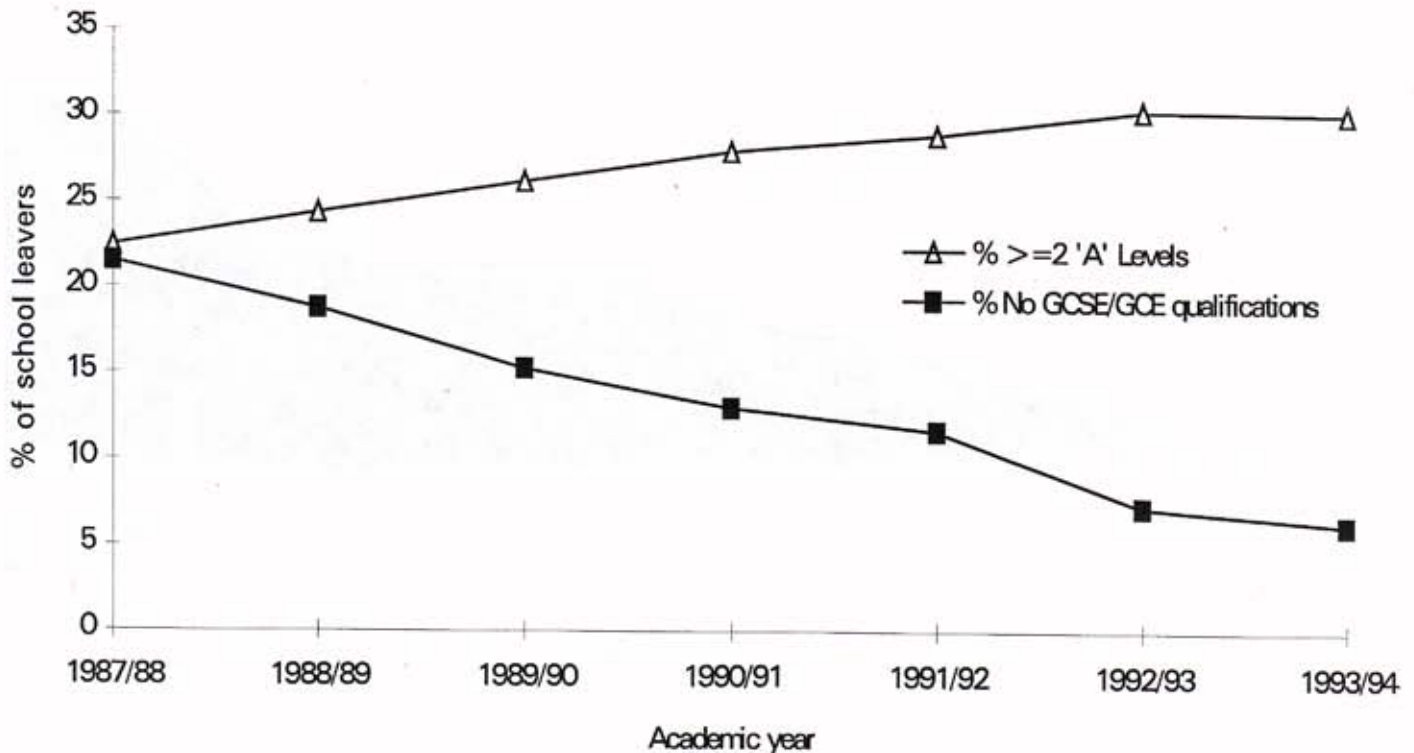
	road density (length of road network per km ²)	transport density (number of cars per km ²)
Northern Ireland	1705	32
United Kingdom	1565	83
Ireland	1340	12
Scotland	655	18
Wales	1603	45

Sources European Environment Agency (1995) "Europe's Environment: The Dobris Assessment", Office for Official Publications of the European Community, Luxembourg.

Listing statistics and conservation area data provided by the Environment and Heritage Service, DoE(NI), Belfast.

A qualitative review of the conservation areas can be found in; Robinson P (1994) "Diamonds in Stone: 21 Years of Conservation Area Designation in NI", Greystone Books, Antrim.

% of school leavers with recognised qualifications



Description Within a sustainable society everyone should have access to the knowledge and training essential for personal development and for the benefit of the entire community. One way of assessing the general level of educational achievement and under-achievement is to look at the formal qualifications of school leavers.

Analysis In Northern Ireland the proportion of school leavers with two or more GCE 'A' levels has steadily increased over the last six years, while at the same time the proportion of school leavers with no qualifications has fallen consistently. As a broad indicator it shows that the level of educational achievement is increasing, with fewer children leaving school without any formal qualifications.

Opinion of state secondary and grammar schools, compared with ten years ago (% 1997)

	Northern Ireland	Great Britain
School leavers are better qualified	67	38
About the same	20	30
School leavers are worse qualified	13	28
<hr/>		
The standard of teaching is better	37	18
About the same	40	38
The standard of teaching is worse	22	40

In direct comparison with GB, the majority of the public feel that the local schooling system is either the same or getting better, with perceived standards of both teaching and qualifications improving in the long-term.

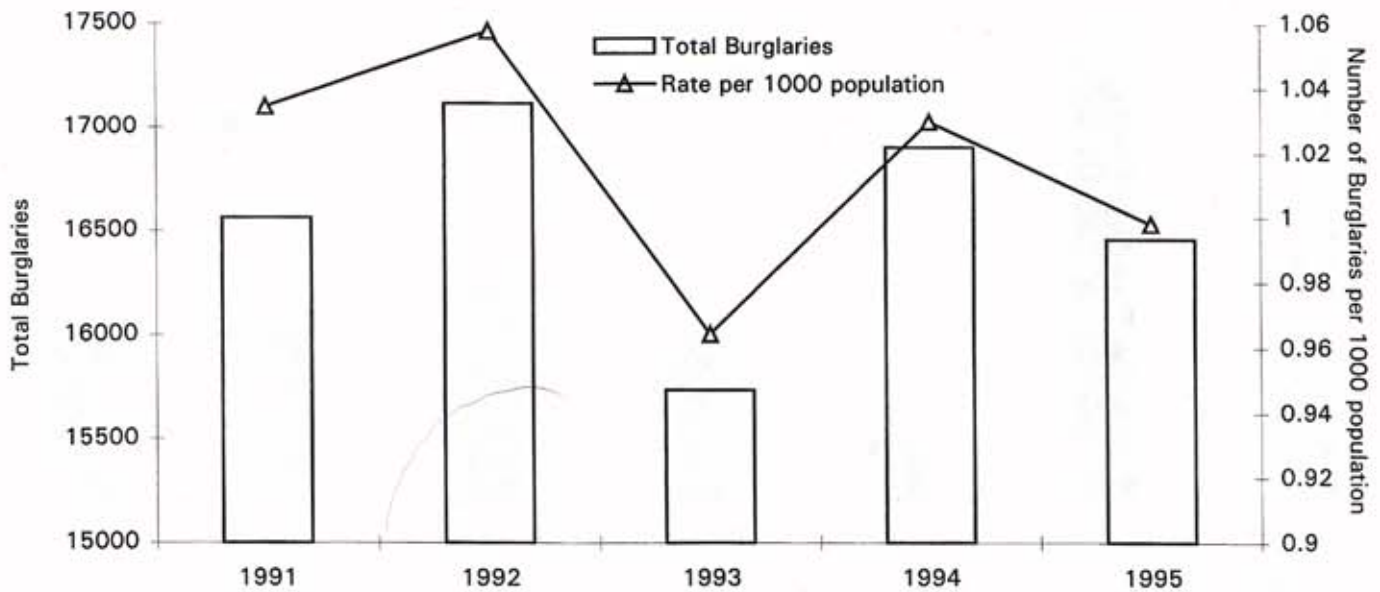
Implications Hidden within the selected indicators is a clear disparity between academic attainment in grammar schools and secondary schools which is not closing. At the national level it has been shown that children from poor families are less likely than those from high income families to do well in formal examinations or go into further education. This link between poverty and educational achievement carries into the sphere of employment where young people with poor basic skills and no formal qualifications are twice as likely to be unemployed and five times more likely to become long-term unemployed. Addressing this educational disparity between different income groups should become a priority within a sustainable society, if we are to make the best use of our most valuable resource - the young people of Northern Ireland.

Sources Department of Education for NI, Bangor.

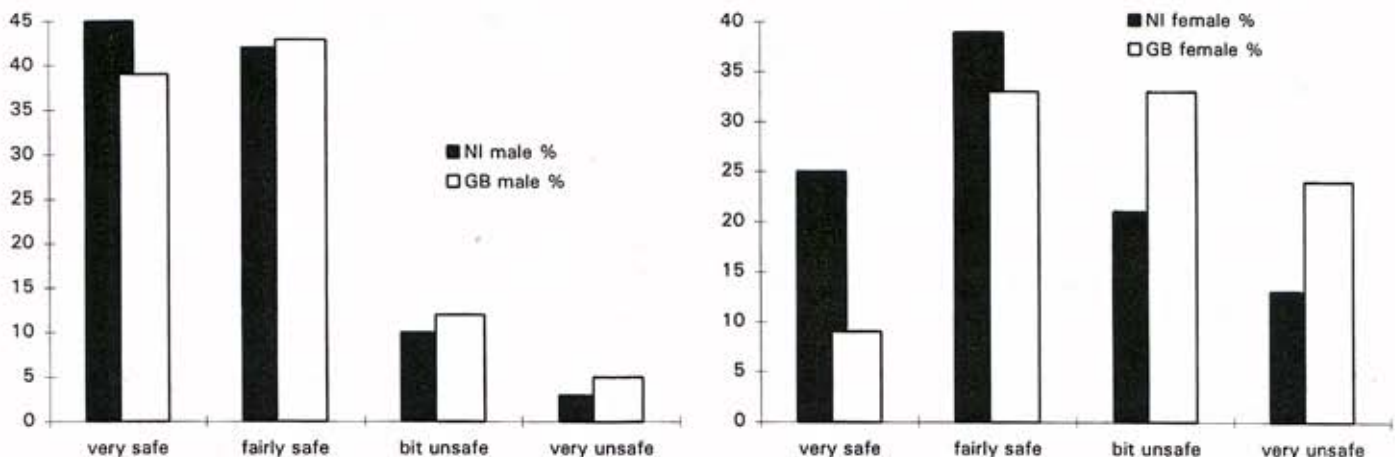
Gallagher T (1997) 'Attitudes to Education in Britain and Northern Ireland' pp 1-19 in Dowds L, Devine P and Breen R (eds) "Social Attitudes in Northern Ireland: The Sixth Report", Appletree Press, Belfast.

Smith T and Noble M (1995) "Education Divides: Poverty and Schooling in the 1990s", Child Poverty Action Group, London.

Number of burglaries and rate per 1000 population



Perceptions of Outdoor Safety in Northern Ireland



Description People should be safe and feel safe in their environment. One indicator of security and crime is the number of burglaries (the number of burglary offenses is the sum of all recorded burglaries and burglary attempts 1991-95, both domestic and non-domestic, in Northern Ireland). These figures only relate to recorded crime and so provide us with a partial understanding of how fearful people are about crime. Perception of security is a complementary indicator, as people's fear of crime will affect their behaviour and lifestyle.

Analysis The figures show the level of burglaries decreasing over the past five years and that people in Northern Ireland feel comparatively safer than people in Great Britain. There are considerable differences between the perceptions of men and women, with men feeling much safer outdoors than women.

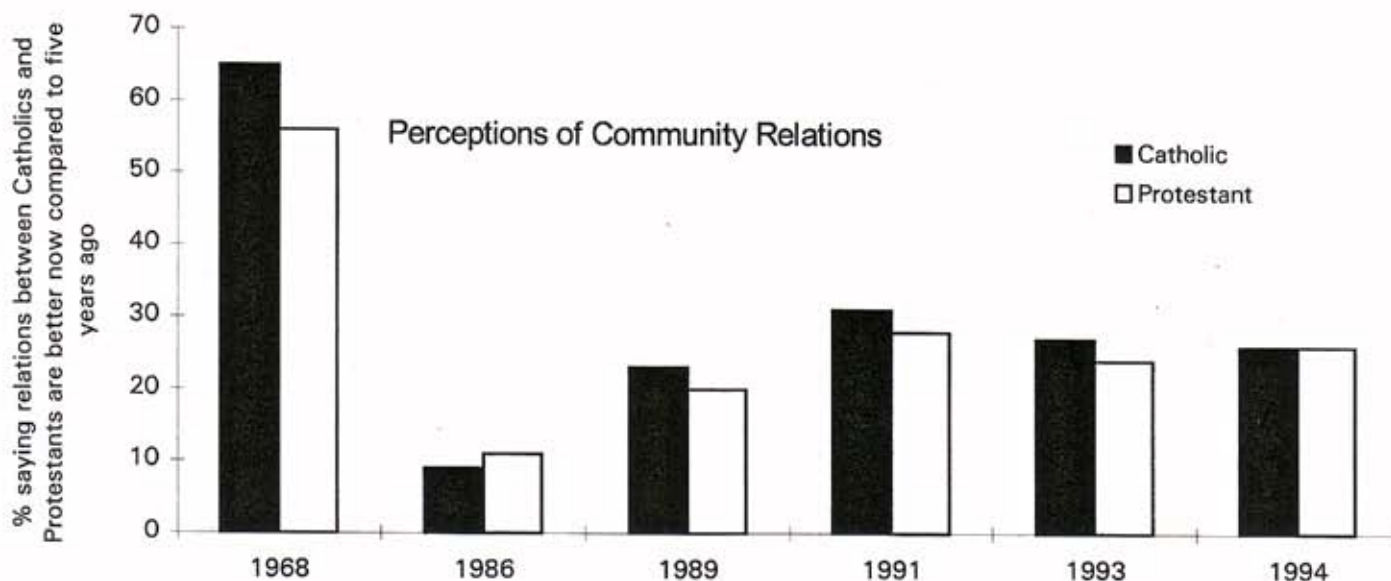
Implications At an international level Northern Ireland is still one of the safest parts of western Europe when it comes to ordinary crime (17% of the population were victims of crime during 1996, half targeted at cars - this figure was over 30% in England and Holland). However, this needs to be stabilised and improved upon in the long-term.

Sources Central Statistics Branch of the Royal Ulster Constabulary, Belfast. Rate per 1000 population is calculated using mid-year population estimates by Northern Ireland Statistics and Research Agency, Department of Finance & Personnel, Belfast.

Geary R and Morison J (1992) 'The Perception of Crime' pp 67-80 in Stringer P and Robinson G (eds) "Social Attitudes in Northern Ireland: Second Report 1991-1992", Blackstaff Press, Belfast.

Comparative European and Global data taken from the 1997 International Crime Victimization Survey, conducted by the Dutch Ministry of Justice and the British Home Office.

Level of sectarian segregation in Northern Ireland



Description This is perhaps the most contentious indicator used as a measure of a sustainable society, yet the particular situation of the Northern Ireland troubles over the last 28 years has had a considerable impact on community relations which cannot be ignored. If our society is to move towards sustainability it means that cultural diversity has to be respected and that people must be able to live without fear of violence or discrimination because of their community or religious background.

Analysis The graph above gives a limited understanding of the perceptions of community relations. It shows respondent's perceptions of relations between Protestants and Catholics now compared to five years ago taken from six different social surveys during the length of the current troubles. The difficulty with these data is the inability to reflect recent changes in the political situation and significant single events. What is clear from the figures is the low level of the population which feel that things are getting better between the two communities. These negative perceptions are shared by Protestants and Roman Catholics.

Implications Poor community relations and distrust have resulted in a duplication of many leisure and recreational facilities, very often side by side. It has physically blighted many of the interfaces within our urban areas and has brought about segregation into religiously homogenous areas. This segregation is most extreme in our inner urban areas and has been increasing with time. While there may be some decline in segregation during the quieter periods of our history, this does not counteract the extreme effects of segregation in times of conflict.

There is evidence to suggest that young people are more moderate than the general population and are more likely to support measures for integration between the two communities. However, this could be as much to do with a general apathy and lack of interest in conventional party politics in Northern Ireland, as demonstrated by the percentage of the young electorate voting in the general election.

Percentage who voted in the 1992 General Election

Age of respondent	Protestant	Catholic
18-30	66	68
31-59	81	76
60+	86	80

If there is a real change of attitude within the youth of Northern Ireland, it suggests that any progress made in building trust between communities will be long-term. In common with so many of the issues surrounding the idea of sustainable development, we may have to wait a long time before we see the effects - positive or negative - of our actions today.

Sources Gallagher AM (1993) 'Community Relations' pp 33-48 in Stringer P and Robinson G (eds) *Social Attitudes in Northern Ireland: The Third Report 1992-1993*, Blackstaff, Belfast.

Gallagher AM (1996) 'Community Relations, Equality and the Future' pp 178-192 in Breen R, Devine P and Dowds L (eds) *Social Attitudes in Northern Ireland: The Fifth Report 1995-1996*, Appletree Press, Belfast.

Boal F W (1995) *Shaping a City: Belfast in the Late Twentieth Century*, Institute of Irish Studies, Queen's University of Belfast.

Dowds L and Devine P (1997) 'Unleashing the Apathy of a Lost Generation? Community Relations among Young People in Northern Ireland' pp 47-69 in Dowds L, Devine P and Breen R (eds) *Social Attitudes in Northern Ireland: The Sixth Report*, Appletree Press, Belfast.

Part of a Strategy

The Environmental Strategy for Northern Ireland was published by Northern Ireland Environment Link (NIEL) in May 1996. This recognised the role of environmental information in helping to bring about changes in our attitudes and behaviour to result in more sustainable lifestyles. The responsibility for collecting, presenting and disseminating good environmental and development information lies with government (both central and local) and a host of other organisations. In the strategy there are recommendations that this information should be both accessible and understandable.

This indicators report is part of the NIEL response to the need for more environmental and development information. It presents a broad range of indicators in an accessible format.

This report also contributes to a wider national indicators project being pursued by local authorities across the UK. It is hoped that it will be of use to the 26 Councils in Northern Ireland and provide a useful framework for the development of more localised sustainability indicators.

A Call for Help

We need to redefine our understanding of 'development'. It must mean more than economic growth. It should reflect our values as a society and begin to relate to meeting people's basic needs and aspirations for a better environment, a stable society and a sense of community. To do this we need to challenge the traditional ways in which we measure progress.

"Indicators of Sustainable Development need to be developed to provide solid bases for decision making at all levels and to contribute to the self regulating sustainability of integrated environment and development systems."

(The Earth Summit: Agenda 21, 1992. Chapter 40)

The Agenda 21 document recognised the need for better, more relevant and accessible information on which to base our decisions and policies. We acknowledge the fact that many of the measures used in this report should be improved. Any comments on the range of indicators, the selection of indicators, the interpretation of the data or any other matters will be greatly welcomed. We are particularly interested in hearing from organisations involved in, or willing to become involved in, data collection and/or monitoring. With help we can build a more complete picture of environmental, economic and social change in Northern Ireland.

Information Constraints

Assistance is required to provide a more complete picture of the state of Northern Ireland and to overcome a number of existing constraints on the availability and analysis of data. In the course of preparing this report, a number of constraints within the current provision of sustainability information across Northern Ireland have been identified:

- *Qualitative information of all types:* For example, we know the numbers of designated ASSI's and the number of listed buildings but we lack information on the state of these natural and built resources. These measurements assess the policy performances of government agencies rather than the actual condition of the physical environment.
- *Changes over time:* When data exist, they are often only for one point in time. This prevents us from analysing long-term trends and knowing whether things are improving or getting worse. Collection of inconsistent data sets over time (in census and social attitude surveys) also limits our understanding of real change.
- *The geographical distribution:* Data collection and monitoring is carried out at a variety of spatial scales and within a variety of administrative boundaries in Northern Ireland. Often these boundaries do not coincide with each other, making sub-regional comparisons difficult.
- *Thematic information 'gaps':* Some of the 21 themes investigated in this report were well covered by past and present monitoring data, especially in the area of traditional economic indicators such as unemployment and Gross Domestic Product. Gaps arise in many of the environmental indicators. This is due to the recent appearance of new types of indicators, confusion over definitions, and to the lack of statutory responsibility for monitoring or management. These gaps indicate a lack of priority given to the physical environment in comparison with the local economy.
- *Measures of involvement and participation:* There is a lack of objective indicators relating to community feelings on the importance of Agenda 21 and the level of grassroots activities and responsibilities. Most available information is provided by large organisations rather than community groups.

This report was prepared within these constraints and limitations. It is useful to highlight these problems in order to improve any future reports.

It is within this imperfect context that the following suggestions are put forward for discussion by those involved both now and in the future in data collection and monitoring. Possible ways in which positive changes can be accommodated in our collection of data and the use of indicators of sustainable development are:

- Information collected should focus on the 'end' rather than the 'means'. We should not be recording the level of policy implementation in isolation from measuring the actual state of the environment.
- We need a long-term commitment to social, economic and environmental monitoring. Monitoring surveys need to be undertaken regularly and seen as an integral part of any programme of action. Neglect of monitoring due to financial constraints is a false economy. There should be consistency in survey methods, questions and terminology over time.
- Better co-ordination among different data collection agencies would make comparisons and spatial analysis easier. Information based on common administrative boundaries (for example, District Council or local plan areas) would provide a useful, consistent basis for policy analysis and better policy integration.
- We need to look at ways of filling the gaps in our knowledge and our understanding of sustainable development. The first stage is to identify the areas where we have inadequate information. Just because we lack the information does not provide us with a justification for ignoring the issue. In so doing, we would only be narrowing the scope of sustainable development. We should be honest about any data limitations rather than ignoring them. To fill the information gaps as part of the Local Agenda 21 process, it may be necessary for different agencies to go beyond their area of statutory responsibility and investigate thematic overlaps.
- Local Agenda 21 must become a process over which the local community has ownership and in which it becomes involved. This report has a role in addressing the issue of community involvement and participation. Involvement needs to extend to the selection and collection of sustainability indicators. It is about establishing an agreement on what direction the community should be going.

"Everyone must be a consumer and provider of information. Collecting data is not a legitimate end in itself ... we must be willing to do something about what we learn."

(Gary Lawrence: Sustainable Seattle Indicators Project)

The Next Stage

We want to hear your views on how indicators of sustainable development in Northern Ireland can be used today and in the future. If you can provide or want to use information on sustainable development, then please contact us with your views on the following questions:


- Do we need something to aim for? There are already a number of targets set by Government at a national level (road accident reductions, CO₂ emissions, recycling, reuse of development land), and there are relevant standards set at the European level (air quality standards, 'blue flag' beaches, water quality).
- Is it useful to set targets for the full range of sustainability indicators?
- How can we achieve a consensus on what local targets or standards should be?
- Is the information in this report at the right scale and correct level of detail for you or your organisation? Much information is available at a more detailed scale which can show the variations within and between Council areas.
- Would it be useful to know how your local area compares with other areas and with Northern Ireland as a whole? Do you need to know where problems are concentrated?
- What is the best way to present the indicators?
- Is the report too detailed or too technical?
- Would you prefer to see more illustrations and less text?

More Information

If you would like to give us your views about sustainable development indicators, or find out more about Local Agenda 21 within Northern Ireland, please contact:

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The authors extend their thanks to all the bodies and organisations which supplied the data for this report. The analysis and presentation of the data and the views expressed in this report are the authors own, as are any mistakes, omissions or errors.

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