

THE IRISH COUNCIL FOR

BIOETHICS

COMHAIRLE BITHEITICE NA HÉIREANN

Irish Council for Bioethics

Environmental Ethics: Whose Planet is it Anyway?



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Introduction

Environmental ethics has been described as having a conscience or moral that reflects a commitment and responsibility toward the environment as well as present and future generations of people. In essence it refers to human societies living in harmony with the natural world on which they depend for survival and wellbeing.

The current focus on counteracting the adverse effects of climate change suggests that society has recognised both the importance of its role in and the need for sustainable environmental management for the benefit and use of current and future generations.

Q1 What is climate change?

Climate change refers to any change in climate over time whether this change is due to natural variability or as a result of human activity. In discussions related to global warming, climate change often refers to a change in climate resulting specifically from human activity. This change is in addition to the natural climate variability observed over time.

Q2 Is climate change happening? If so what has caused this change?

The major scientific consensus is that global warming and, therefore, climate change is already happening. The overriding cause of this global warming is considered by most scientific experts to be man-made greenhouse gas emissions. The combined economic, social and industrial progression experienced both historically and currently in developed and developing countries has been identified as a major cause of these emissions.

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Q3 How is energy generated and consumed in Ireland?

It is now clear that the generation and use of energy has had a major influence on climate change. Currently in Ireland the vast majority of our energy is generated from fossil fuels: in electricity generation e.g. in peat and gas fired power stations; in transport and in heating e.g. gas fired central heating. Furthermore, energy usage in Ireland is high with greenhouse gas emissions currently 12% above the targets set under the Kyoto Protocol (1998).¹

¹ Department of the Environment, Heritage and Local Government, 2007. *Ireland National Climate Change Strategy 2007-2012*. Dublin, 60p.

Q4 What are the main socio-economic, environmental and health impacts of dangerous climate change?

The weight of scientific opinion states that, the major impacts of climate change will mostly be experienced by people in the developing world. However, climate change will, ultimately, have a global impact. Human activity has already caused increases in the level of greenhouse gases e.g. carbon dioxide, methane in the atmosphere and related increases in global temperatures, which is artificially accelerating climate change. As a worst-case scenario, further increases in global temperatures could lead to rises in global sea levels, leading to large-scale flooding in coastal areas throughout the world. Weather patterns could become more severe, with major storms and hurricanes occurring more frequently. Heat waves and alterations in existing rainfall patterns could result in drought in some regions, whereas other areas will experience flooding.

From a socio-economic perspective, climate change would have direct negative impacts on industries such as agriculture, forestry, fishing and tourism. Water and food shortages would impact on health especially in the developing world, as would the expansion of tropical diseases, e.g. malaria, to new countries due to increasing temperatures. Increased coastal flooding would impact on numerous cities throughout the world with social, political and economic repercussions, e.g. an economic downturn, large-scale migration from flood prone regions, disruption of transport and logistical networks. In addition, climate change would have a severe impact on the environment including; the extinction of numerous plant and animal species, increased pressure on existing habitats, both of which would damage the structure and functioning of ecosystems.

Experts have estimated that even moderate global warming could result in increased storm intensity and frequency, changes in the pattern of rainfall, as well as a rise in sea level, which could result in approximately 300km² of coastal areas in Ireland becoming permanently flooded.



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Q5 Can the impacts of climate change be lessened? How?

International agreements² and the work of the Intergovernmental Panel on Climate Change (IPCC) have heightened global awareness of the need to respond to potential threat of serious climate change. The general scientific consensus suggests that there is no single panacea to the problem of climate change, therefore, a mixture of strategies including mitigation, adaptation, technological development and research provide the best platform to tackle climate change.

It has been suggested that no matter what steps are now taken to mitigate the effects of climate change, some impacts are now unavoidable. However, it is generally believed that, many other impacts of climate change can be avoided, reduced or delayed through a range of mitigation measures, which can be made nationally and internationally, at a regional level and even by individuals.

Alterations to how energy is generated and utilised is seen by many as an important tactic in combating the potential impacts of climate change. Improved energy efficiency and conservation in electricity generation, transport use and management, and in buildings has been identified as an important step in reducing the use of fossil fuels and their resulting emissions. The level of emissions can also be reduced by switching to renewable and alternative energy sources, such as solar, wind, hydro, tidal and wave energy. Unlike fossil fuels, these resources will not be depleted. In addition, other sources, such as biomass and biofuels can be replenished relatively quickly. Although, not possible in Ireland, geothermal energy has been harnessed for heating and electricity generation, e.g. in Iceland and New Zealand. Some countries, e.g. the UK and

France, are also looking into building more nuclear power plants as a low greenhouse gas emission energy alternative to fossil fuels. However, opponents of nuclear power have voiced concerns about the perceived risks of this technology and the problem of storing nuclear waste products.

In addition, other efforts can and are being made to cap and reduce emissions of carbon dioxide and other greenhouse gases e.g. via carbon emissions trading and carbon taxes; developing both natural and technological methods to remove and store atmospheric carbon dioxide.

² Such international agreements include, the Rio Declaration on Environment and Development (1992), the United Nations Framework Convention on Climate Change (UNFCCC) (1992) and the Kyoto Protocol (1998).

Q6 Should individual countries have the right to exploit and utilise their environmental and natural resources to facilitate their development?

Some would argue that, it is the role of a responsible government to exploit and utilise the resources of a country in order to promote the welfare and wellbeing of the citizens of that country. In fact, many would consider it immoral for a government not to harness

their country's resources in a responsible manner as part of that country's overall economic, industrial and social development.

Others would suggest that, while benefiting their own citizens, a country's activities in using its resources could adversely affect the lives, rights and environment of citizens in other jurisdictions, e.g. through human-induced climate change. These people would argue that one country's autonomy i.e. the right to make independent choices without any external influences, should not be unlimited and they should not be allowed to conduct activities in their country that would harm individuals elsewhere. Moreover, some people are also of the opinion that the exploitation of environmental resources should be conducted in a sustainable fashion in order to lessen the potential negative impacts on both current and future generations.

Q7 What are the rights and responsibilities of developed and developing countries?

Many people would consider it hypocritical for developed countries to restrict developing countries from conducting industrial and urban activities critical to their economic development (which are causing increased greenhouse gas emissions), when developed countries conducted similar activities in the past.

Alternatively, some would argue that developing countries have a global responsibility not to add to the already serious problem of climate change. The view has been expressed that some form of compromise could be reached whereby developed countries show more solidarity with developing countries by taking the initiative in reducing their own emissions and also by assisting developing countries in their efforts to follow suit.

Q8 Is the "Polluter Pays" principle fair?

Proponents of action against human-induced climate change have argued that under the "polluter pays" principle those countries whose activities have had the biggest influence on climate change, i.e. those who produced the most greenhouse gas emissions, should be made to pay for it. Many would view this as a just system because the more you pollute the higher the penalty you would have to pay. In addition, advocates of



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the "polluter pays" principle see it as useful deterrent against continuing to pollute.

Opponents of this system would question how fair it is since many developing countries cannot afford to pay such penalties or to implement the necessary programmes to reduce greenhouse gas emissions. They argue that developed countries should assume the majority of the steps necessary to minimise their emissions, thereby, reducing the effects of climate change overall. Furthermore, once developing countries are generating capital, at least some of this capital should be assigned to reducing or preventing their own greenhouse gas emissions.

Q9 Do individuals have a responsibility to take action against climate change?

Some people would argue that, since climate change is such a massive issue, effective action against it should be taken at both a national and an international level. In their view, any efforts made by an individual to combat climate change would have a minimal impact and it is the responsibility of governments to initiate large-scale initiatives on their behalf to reduce greenhouse gas emissions.

Conversely, it has been suggested that, since society is made up of individuals, even the limited actions of an individual to reduce his or her own greenhouse gas emissions i.e. their “carbon footprint” could have a positive, cumulative effect on climate change if conducted by society as a whole. Furthermore, it has been argued that governments are elected by individuals and therefore, politicians will only be receptive to taking action on climate change if they believe it is of real concern to individual citizens.

Q10 Does society have a responsibility towards future generations?

While recognising society’s entitlement to utilise the environment for the varied resources it can provide, some people would argue that society should also act as the steward of the environment. Under this stewardship role, society’s job would be to manage and protect the environment for the benefit and use of current and, more importantly, future generations. Thus, it could be considered unjust for society to take what it can from the environment now, without any consideration of the effects such actions may cause in the future.

Others take the view that society should not be restricted in their actions today because of worries about what may happen in the future. They are confident that given the ingenuity of man and potential technological developments, future generations will be able to adapt and find solutions to any problems caused by our actions.



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