



## **IMMIGRATION POLICY AND THE INTER-RELATED ISSUES OF WORLD CLIMATE CHANGE AND POPULATION EXPLOSION**

The issue of continued large scale immigration into the UK, while immediate, also needs to be seen in a longer-term perspective, in the context of two of the greatest issues of our time: the changing climate of the planet, and the world's ongoing population explosion.

To take the latter first, some ecologists consider that an optimum human population for the earth, in terms of its resources, might be in the region of 2.5 billion. Only 75 years ago, the rising world population was still around the 3 billion mark. Today, however, it is 6.2 billion or more, having increased six fold since the mid-18<sup>th</sup> Century. According to the International Institute for Applied Systems Analysis, this figure is likely to reach 9.4 billion by 2050, even allowing for a global decline in fertility. (On a higher UN fertility projection, the figure could be 11.2 billion).

Virtually the entire increase will take place in the developing countries – in most spectacular manner in India (currently around 1.1 billion, but expected soon to overtake China's 1.3 billion), Pakistan, Nigeria and Iran – in all of which, reproductive levels are still very high and not likely to fall in the immediately foreseeable future. There will also be large increases in the poorest and least developed countries in Africa.

The Earth has not been in this situation before. Even without climate change (see below), any such exponential population increase could well render "sustainable development" and "making poverty history" no more than empty slogans. Global shortages of arable land, water, energy and other essentials of life would inevitably become acute, whatever presently foreseeable countervailing technologies might become available.

Factoring in predicted climate changes, the longer-term outlook may now be even more problematic.

There is today robust scientific evidence that emissions from human economic activities, particularly the burning of fossil fuel for energy, are changing the Earth's climate. The margins of doubt have narrowed dramatically in recent years, as to the extent of human culpability. The 2007 Fourth Assessment of the UN's International Panel on Climate Change (IPCC) is both clear and precise – and 95% of the world's scientists are unlikely to be wrong. It is now no longer a question of *whether*, but *how* and *where* it will strike. The Bali Declaration of December 2007 quite rightly called for urgent action.

Such, at any rate, is the settled view of the competent British authorities. The Report of a government-sponsored scientific conference organised by the Meteorological Office's Hadley Centre, published in 2006, was entitled 'Avoiding Dangerous Climate Change'. In his foreword, the then Prime Minister wrote that "the risks of climate change may well be greater than we thought"; and that "Greenhouse gas emissions need to slow, peak and reverse". Mr Blair couldn't have been clearer. Mr Gordon Brown

concur. Mr David Cameron is equally exercised. The Government's outgoing Chief Scientific Adviser, Sir David King, says that climate change is the greatest single global challenge we face.

The issue is therefore, serious and urgent, calling for a world-wide shift towards a low-carbon economy, on the basis of international collaboration of a degree never before known. This is not just an environmental issue. It is also an economic issue, an energy issue, a foreign policy issue and a security and defence issue. And the biggest difficulty of all is political. It could well prove the most difficult problem the modern world has ever had to face.

To look at the detail, the most important single cause of global warming (as to around 50%) is the build-up of CO<sub>2</sub> in the upper atmosphere, as the result of comparatively recent industrial activity on the earth's surface, mainly through the burning of fossil fuels. The present level of atmospheric CO<sub>2</sub> has not been seen for over 650,000 years. Methane, nitrogen oxides and sulphur dioxide are also part of the picture. Taken together, these so-called 'Greenhouse Gases' (GHG) have had a screening effect. Infra-red heat from the sun which is normally reflected back out into space, is trapped in the atmosphere, thereby raising the earth's temperature. This, in turn, will affect weather patterns, ocean flows, and the polar ice caps, with potentially adverse consequences for vegetation, marine life, sea levels and human life itself.

The problem doesn't stop here. The phenomenon can be progressive, when magnified by what are called 'positive feedbacks'. Thus, the more the ice caps melt, the less heat is bounced back into space, as the so-called 'Albedo' or reflectivity effect diminishes. The warmer it gets, the more methane and other gases get released from existing 'sinks', below ground and in the beds of the world's oceans, into the atmosphere. The acidity of the oceans increases to a point which affects algal growth and the chain of marine eco-systems. Tropical rain forests are destabilised and begin to get replaced by sand and desert. In the worst scenario, a 'sudden discontinuity' or 'tipping point' can be reached, in which the warming becomes self-feeding and a runaway process is initiated which cannot be controlled and may prove irreversible for many thousands of years.

It is true that the planet has never been stable at any period in its evolution. There has been a roller coaster of purely natural variations in the climate for hundreds of millions of years. Glacial periods have been interrupted by warmer, inter-glacial, periods. There was a runaway greenhouse effect, some 55 million years ago; a brief but rapid cooling some 12,000 years ago. The last 10,000 years have been warmish and relatively stable – but with wobbles. There were floods, then droughts, in Mesopotamia and Egypt and North Africa between 5,600 and 1,200 BC – causing the decline of the Indus Valley, Sumerian and Mycenaean Civilisations and the rise and fall of Pharaonic dynasties on the Nile. Droughts in Latin America in the 800s AD provoked the collapse of the Maya. Settlement and farming in Greenland in the 10<sup>th</sup> Century were snuffed out by extreme cold. In England, the so-called 'Medieval Warm Period' (900-1300) was followed by a 'Little Ice Age' (1300 – 1860), when bonfires could be lit on the Thames.

These historical ups and downs – as opposed to what is happening now – were due entirely to natural causes. Among them, variations in the ellipse of the earth's orbit round the sun; and shifts in the earth's axis of rotation and angle of tilt. Volcanic eruptions, too, were part of the picture. Possibly sun spots had something to do with it. Also the impact on the planet of large asteroids from outer space. Conceivably even cosmic irradiation.

But now we also have man-made complications to consider.

Since the Industrial Revolution, humanity has been using the sky as a waste unit. And the 'sensitivity' of the world's climate to GHGs has in fact proved greater than scientists had previously thought. The planet has warmed, since 1970, by 0.7°C (by 1°C since 1860). A further 0.5° increase is predicted, for 2030. Sir David King fears that a global temperature rise of 3°C is possible, even if GHG levels are limited to twice pre-industrial levels. I find this distinctly scary, given that the last (Cretaceous-Tertiary) mass extinction, 65 million years ago, took place when temperatures were 4°C higher than they are today.

What will a warmer world look like? The great land masses of Africa, Asia and Latin America – where the poorest and most vulnerable human beings live – will be the worst affected. But Europe and North America will not be unscathed.

On a global scale, the effects of general warming are likely to include:

- new patterns of rainfall and drought and increasing frequency of extreme weather events ;
- impacts on all natural ecosystems. Tropical forests will shrink significantly. Biodiversity will diminish. The patterns of insects and micro-organisms will change ;
- impacts on fresh water resources, and in particular increased shortages in many poor countries in Asia and Africa. Global demand for water is doubling every 21 years, yet supply remains what it always has been ;
- impacts on sea levels. The pace of change seems to be increasing, and estimates are being revised upwards. A rise of up to 3 feet – maybe much more – is anticipated, by 2100. Ultimately, at some future point, the rise could be as great as 20 feet.
- impacts on food supplies. There may be moderately increased crop yields in high and mid-latitudes countries, but dramatically decreased yields in lower latitudes ;
- impacts on human health. Micro-organisms respond rapidly to changes in temperature and moisture. Old diseases such as malaria could return and new diseases could arise ;
- impacts on human settlement, with increased numbers of refugees both within and between countries and the possibility of large-scale population movements.

On this last point, the security and defence implications of possible large-scale migration are considerable, even massive; and raise obvious questions as to our immigration policy.

Advanced Western societies tend to feel, rightly or wrongly, that there is a limit to the number of people from other countries and cultures which they can absorb, without damaging social cohesion. There are economic arguments – albeit disputed – in favour of continued, at least semi-skilled, immigration throughout the EU, to meet the declining indigenous birth rate and promote economic production and growth. But social and infrastructural costs need to be factored in, as well as political realities – including what David Goodhart ('Prospect' January 2008) terms "the belief that British citizenship is not sufficiently valued or protected in an era of mass immigration".

Yet concerns like these could eventually be put in the shade, by major global population and climate change. Land frontiers can always be penetrated (as we have seen, across the long Southern frontier of the US). Sea crossings are not a real barrier (as the Spanish and Italian authorities are well aware). Within a host country, massive numbers of refugees could represent a destabilizing element, in what would anyway be increasing difficulties of social and economic management. Between countries and regions, there would be still greater tensions. Desperation could push Africans into Europe, Chinese into the relatively empty parts of Russia, Indonesians into Northern Australia.

To be more specific, and according to the 2006 Stern Review of the 'Economics of Climate Change', "the homes of tens of millions .... are likely to be affected by flooding from coastal storm surges with rising sea levels. People in South and East Asia will be most vulnerable, along with those living on the coast of Africa and on small islands". A case in point, of particular concern to the UK, is Bangladesh. One quarter of its population (i.e. 35 million people) lives within the coastal flood plain. Extreme weather events in 2000 affected 3 million people there – resulting in violence, as tribal people in Northern India clashed with emigrating Bangladeshis. If coastal Bangladesh were to be immersed by a rise in sea level, there would inevitably be even stronger pressures to emigrate, including to the UK. In a completely different scenario, if Australia, rather than be flooded, were simply to dry up (and its water shortage is already quite acute in some areas), there could be some movement back to the UK by past British emigrants to the sub-continent.

To revert to the broader picture of possible population displacement across an over-populated and climatically de-stabilised planet, defensive reactions could, of course, lead to the building of virtual fortresses round the rich, developed, countries to keep out intruders and protect resources. But, as the environmentalist and former diplomat, Sir Crispin Tickell, pointed out in a lecture in January 2007 to the Royal United Services Institute for Defence & Security Studies, "walls of this kind are never effective for long. The Israelis will be no more capable of keeping out Palestinians than the Americans of keeping out Mexicans".

It was no doubt from consideration of the foregoing trends, that an article in a Christian Aid Report ("The Climate of Poverty: facts, fears and hope", of May 2006) quoted one Professor Eric Odada, of the International Council for Science. "Europe should be prepared. We are either going to prosper together, or perish together when climate change comes. They should not think that the barrier between Morocco and Spain will stop people from the South moving into Europe".

But these are extreme scenarios. There is probably little that the advanced countries can do, directly, to restrain the global population increase; and there is an obvious malign synergy between this and the climate issue. But there is still time, to prevent at least a *climatic* catastrophe. The 2006 Stern Review points to a range of attainable actions, if an international consensus can be achieved in the next round of negotiations. As "Friends of the Earth" point out, "We can cut our carbon emissions with a mix of energy-saving measures, clean and safe energy sources and innovations in industry. Many of the technologies are already in commercial use". Sir Nicholas Stern, for his part, is clear in the view that not only 'adaptation' but also 'mitigation' are still well within the bounds of the possible.

In the event, therefore, of a climate crisis in the not too far distant future of ultimately manageable, rather than totally catastrophic, global proportions, a great deal would depend, for Britain, on cogent and enforced EU and national immigration policies and controls.

This will not be a straightforward exercise. It is understandable that the Prime Minister should want a British statement of values, to serve social cohesion and underpin national identity, at a time of unprecedented change in the way we now live. But, where migration and multi-culturalism are concerned, political correctness and ethnic-religious separatism are undoubted obstacles on the path of frank parliamentary and public discussion. The Chief Rabbi is on record as believing that Britain is becoming a place where free speech is at risk (The Times, 20 October, 2007); the Bishop of Rochester, that fundamentalist Islam risks creating urban no-go areas. Nor will there be any glib technical solutions, cost-free to the tax payer: we are nowhere near agreement on how to count and control migration and operate a national identity scheme.

We are not alone in facing this problem. As the Economist's special report on immigration puts it (5 January, 2008): "Whether they think migration is good or bad, experts agree on one thing: that governments are generally failing, or not even trying, to manage it correctly". To complicate matters further, even national sovereignty, as it was understood at least until the mid-20<sup>th</sup> Century, is itself porous, these days; and the entire concept could simply mutate into something else, as the Century proceeds, in a globalised world economy and with increasingly free movement not only of goods and services, but also of peoples and religious and social concepts.

Nevertheless, the effort must be made, today, to find a rational and effective immigration policy; the challenge, tomorrow, will otherwise be more acute and less easy to respond to.

Leslie Fielding  
January 2008

Sir Leslie Fielding is a former Vice-Chancellor of the University of Sussex and Chairman of the Sussex Overseas Development Institute. Before that, he was Director General of External Relations in the European Commission, responsible for EU Trade Policy worldwide, together with Development Assistant Programmes in non-Associate developing countries. He has worked as a diplomat in Tehran, Singapore, Phnom Penh, Paris, Tokyo and Brussels and travelled extensively on UK and EU business. Leslie Fielding's book about the origins of the Pol Pot tragedy ("Before the Killing Fields: Witness to Cambodia and the Vietnam War") was published by IB Tauris shortly before Christmas. He is a Lay Reader Emeritus in the Church of England.