The Campaign to Protect Rural England (CPRE) is one of the leading conservation organisations in England – focused, as its name states, on the protection, sustainable use and enjoyment of England’s countryside in particular. With nearly 70,000 supporters across the country and over 200 local and regional groups covering every English county, CPRE has national and local presence – giving it considerable political clout. On its website, CPRE warns: “The countryside is unique, essential, precious and finite – and it’s in danger. Every year, a little more is lost forever to urban sprawl, new roads, housing and other developments. Rural shops and services are closing, and increasingly intensive farming is changing the character of the countryside. Climate change, too, will have serious impacts on the rural environment.”

And states its mission as being: “...to stand up for the countryside: to protect it from the threats it faces, and to shape its future for the better.”

CPRE has done an excellent job of highlighting the threats to our countryside and seeking to slow down its erosion by all the impacts it sets out above. The organisation has a deserved reputation for using the planning system in defence of the countryside and, in particular, for championing the concept of Green Belts around major conurbations to slow urban sprawl.

But all that valuable work – amounts, at best, to holding the line.

As CPRE notes, the English countryside is “finite”, with “a little more lost” every year. Whereas the development pressures it identifies as being the cause of that loss are growing:

- Since 1900, the area of farmland in England has diminished by 12% - an overall loss of 700,000 hectares
- Over the same period, England’s population has grown by some 20 million people, from around 30 million in 1900 to over 50 million currently (England and Wales = over 56 million)
- The UK’s population is predicted to increase by a further 10 million people by 2030 – the majority of whom will be living in England
- Meeting the needs of those extra 10 million people would require the building of 10 more cities the size of Birmingham
- Together, England and Wales have an average 371 people per square kilometre. England’s people density rises to over 400 per square kilometre – neck and neck with Holland to claim the title of ‘most densely populated country in Europe’

References
1 Agriculture and land use: Demand for and supply of agricultural commodities, characteristics of the farming and food industries, and implications for land use in the UK. A. Angus, P.J. Burges, J. Morris, J. Lingar, Cranfield University, Cranfield, Bedfordshire MK43 0AL, United Kingdom, Cranfield School of Agriculture, Food and Rural Development, Newcastle University, Newcastle upon Tyne NE1 7RU, United Kingdom.
The UN’s medium projection for a stable world population is 9.3 billion by 2050 – but the range extends from as low as 8 billion to as high as 11 billion. Population growth, here in the UK and across the world, is putting increasing pressure on the ‘Global Commons’ we all rely on, wherever we live – the Earth’s atmosphere, global fisheries, forests, overall biodiversity – as well as the wildlife, natural resources and landscape of our own ‘local’ environment and countryside.

Yet there is no in-depth analysis or discussion of population and its impacts on our countryside anywhere on CPRE’s website.

That omission is not unique.

No leading environment or conservation organisation is talking publicly about population – possibly out of concern that they will be accused of being ‘misanthropic’, ‘racist’, of ‘blaming the poor’ or perhaps because they accept fatalistically that the Earth’s human population will grow by at least 2 billion more people to reach 9.3 billion by 2050 and nothing can be done to prevent that UN projection becoming a fact?

There is no justification or excuse for such fears and fatalism.

Addressing the issue of population directly and in-depth offers a positive agenda that is about:

- Increasing the well-being of everyone on Earth
- Giving all women the right to choose and the freedom to control their own fertility – at least 215 million women worldwide, mainly in the poorest countries, want to delay or stop their next pregnancy, but do not have access to modern, safe contraceptive methods
- Achieving sustainable development that respects the boundaries of our finite planet
- Enabling people throughout the world to plan the size of their families without coercion
- Sustaining a world that is rich in nature and renewable resources.

As one of England’s leading and most respected conservation bodies, CPRE has a responsibility to address the issue of population and promote this positive agenda for the good of everyone and all life on Earth.

**References**


As noted above, official projections are that the UK’s population is set to rise by 10 million to over 70 million by 2030 – with the majority of that increase and so infrastructure pressure occurring in England.

Even the Green Belt, the iconic measure maintaining distinctiveness between urban and rural areas championed by CPRE, “as the most popular planning policy in England and the envy of the world”, is under threat:

- Over 1000 hectares of Green Belt land have been lost each year since 1997
- More than 45,000 homes, equivalent to a city the size of Bath, have been built on Green Belt land over the same period
- A recent CPRE briefing warns that pressure is set to increase with over 80,000 houses, 7 new roads, and more than 1000 hectares of business parks, opencast – mines and other industrial development proposed on Greenbelt land (an area equivalent to a new town the size of Slough).

“Government figures show a greenfield area nearly the size of Leicester vanishes under bricks, mortar, concrete and asphalt each year – in a country which is already one of the most heavily built up in the world.”

CPRE website

References

6 http://www.defra.gov.uk/environment/natural/uknea/
7 Green Belts – Robustly Protected or Under Threat? www.cpre.org.uk/news/media-centre

Relevance to CPRE

“The UK population will continue to grow, and its demands and expectations continue to evolve. This is likely to increase pressures on ecosystem services in a future where climate change will have an accelerating impact both here and in the world at large. The UK’s population is predicted to grow by nearly 10 million in the next 20 years.”

UK National Ecosystem Assessment, 2011

The UN’s medium projection for a future world population is 9.3 billion by 2050 – but the range extends from as ‘low’ as 8 billion to as high as 11 billion.

Of the world’s estimated 1.7 billion ‘high-rate consumers’, 50% now live in the developing world.
Two recent reports highlight the issue of human population as a, if not the key, factor in impacting upon our planet and its sustainability for our and all species on Earth.

Both the current and predicted numbers of people on the planet, the number of people in both developed and developing countries, and of course, per person consumption rates in both.

Most importantly, the reports raise the debate above out-dated and polarised arguments as to whether it is the number of people on the planet or how much they consume that is critical.

As these reports make clear, it is not either or – but both.

People and the planet

The Royal Society’s report, People and the planet, published in April 2012 is the product of a Working Group of over 20 distinguished academics, scientists and experts, supported by a science policy staff of 5 advisors. The Working Group sought evidence from over 100 individuals and organisations across the globe; as well as receiving nearly 200 additional inputs sent in separately and via those attending three workshops held on the role of industry, NGOs and technology.

The Working Group’s findings and recommendations were reviewed by an independent panel of eight experts before being approved by Council of the Royal Society.

http://royalsociety.org/policy/projects/people-planet/

The Living Planet report 2012

The Living Planet report is produced by the Global Footprint Network and the World Wide Fund for Nature working in collaboration with the Zoological Society of London and the European Space Agency.

By collating and comparing a vast array of data on global biodiversity, ecosystems and natural resources, the Living Planet Report provides an unique overview of humanity’s demands and impacts upon our planet and their implications for the sustainability and well-being of our and the other species with which we share the Earth.

http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/
People and the planet

“Population and the environment should not be considered as two separate issues.”

The Royal Society makes three summary recommendations for action:

• Firstly, that the world’s 1.3 billion poorest people need to be raised out of poverty
• Secondly, that rates of consumption must be urgently reduced in the most developed and emerging economies
• Thirdly, that global population growth needs to be slowed and stabilised.

Living Planet report

“With the world already in ecological overshoot, continued growth in population and per person footprint is clearly not a sustainable path.”

The report reaffirms the findings of earlier Living Planet assessments that the Earth’s capacity to provide ‘fair shares’ of its natural resources and outputs had already been exceeded “sometime in the 1980s”. By 2010, human activities and demands were using up one and a half planet’s worth of the resources that are available annually. Clearly, not everyone on Earth is getting their fair share.

The report and its predecessors provide the best estimate and most comprehensive ‘snapshot’ of the state of all life on Earth. The latest report estimates that global biodiversity has declined overall by 30% since 1970 and by double that (60%) in the tropics over the same period.

The authors conclude, “Human population dynamics are a major driving force behind environmental degradation. One aspect of this is the overall size of the global population, which has more than doubled since 1950 - to 7 billion in 2011 and is forecast to reach just over 9.3 billion people by 2050.”

“Ignoring this diagnosis will have major implications for humanity. We can restore the planet’s health but only through addressing the root causes, population growth and over-consumption.”

Jonathan Baillie, Conservation Programme Director, Zoological Society of London

Key findings

The world’s population is growing currently at a rate of 80 million more people per year – and despite falling birth rates is predicted to continue to grow up to and beyond 2050, due to the large numbers of young women of child-bearing age on the planet.
Scientists term the current era on Planet Earth the ‘Anthropocene’; dominated as it is by us and our activities which threaten to cause the ‘6th Great Extinction’ of life on Earth – comparable to the major geological events evident in the fossil record.\(^1\)

The key difference between this one and the previous five is that the catastrophic changes are happening over decades rather than geological timescales.

For the UK, the changes to our countryside, its biodiversity and ecosystems may appear less dramatic than on the global scale, but they are still considerable:

- Over the past century, an average 6,500 hectares of land has left agriculture every year– most going for built development\(^12\)
- 70% of our 333 farmland species of plants, butterflies, bees, birds and other mammals are in decline\(^13\)
- Alongside that loss of biodiversity, there’s been a parallel 30% decline of the vital ‘services’ our countryside can provide – flood prevention, water catchment management, and of increasing importance, carbon sequestration\(^14\)
- Between 1993 and 2000, urbanisation of the countryside increased light pollution by 24% and the amount of truly dark night sky fell from 15% to 11%\(^15\)

We know from the Living Planet report that the human species is already drawing down excessively upon the Earth’s available resources – such that we (or some of us) are using up one and half planet’s worth of resources that would be available on a sustainable basis. Calls from environmental groups to rebalance the equation by reducing our consumption in the developed world have to date gone largely unheeded.

Consumption has been the factor that environmental NGOs and policy makers have focused on as the key driver of detrimental environmental impacts upon the planet, its biodiversity and ecosystems. The chosen paths to address unsustainable consumption have been via attempts to promote ‘lighter footprints’ coupled with smarter, more efficient ways of using and re-using the resources required to produce the goods and services people consume.

That is an understandable and pragmatic approach – but it has not been sufficient.

The speed and extent of the changes to our planet’s biodiversity and ecosystems are hundreds to thousands of times what would be expected as the normal ‘background level’.

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References
2 Agriculture and land use: Demand for and supply of agricultural commodities, characteristics of the farming and food industries, and implications for land use in the UK. A. Angus, P.J. Burges, J. Morris, J. Lingar, Cranfield University, Cranfield, Bedfordshire MK43 0AL, United Kingdom, Cranfield School of Agriculture, Food and Rural Development, Newcastle University, Newcastle upon Tyne NE1 7RU, United Kingdom.
5 Night Blight! CPRE, May 2003; http://www.cpre.org.uk/resources/countryside/dark-skies
Until the factor of Population is added to the equation, organisations and policy-makers seeking to create conditions whereby everyone on Earth can enjoy a decent quality of life and a fair share of our planet’s resources without compromising the ability of future generations to do so – i.e. live sustainably – are doomed to failure.

At the beginning of the 20th Century there were 1.6 billion people on Earth, whose activities (predominantly in the industrialised developed countries) released 0.5 billion tonnes of carbon to the atmosphere annually. By 2000, the number of people had increased to over 6 billion and global annual carbon emissions by nearly 15 times to 7.3 billion tonnes.

True, carbon emissions per person and overall are much higher for those of us living in the industrialised nations – each new born UK citizen will be responsible for 35 times the amount of greenhouse gas emissions than a baby born in Bangladesh and over 160 times more than one born in Ethiopia. But the rest of the world is catching up – the fastest growth rates in both per capita and total greenhouse gas emissions now occur in the less developed countries.

Many would argue that this is only fair – people in the less developed countries deserve a greater share of the Earth’s available resources to enable them to attain the quality of life of people living in the industrialised countries. The USA with just 5% of the world’s population is responsible for over 20% of global carbon dioxide emissions – and its current trajectory is to increase emissions of greenhouse gases by 10% on 1990 levels. Whereas China with four times the share of the world’s population at 20%, produces 17% of global greenhouse gas emissions.

However, China’s overall emissions have rocketed by 170% since 2000, driven by a rising and increasingly affluent population, such that it has overtaken the USA and won the dubious title of being the World’s major emitter of greenhouse gases. A trend noted in the assessment of the economic impacts of climate change by Sir Nicholas Stern for HM Treasury, “Population growth rates will be higher among the developing countries, which are also likely in aggregate to have more rapid emissions growth per head. This means that emissions in the developing world will grow significantly faster than in the developed world, requiring a still sharper focus on emissions abatement in the larger economies like China, India and Brazil.”

An additional 10 million people in the UK will make a big difference to our capacity to curb climate change.
Official UK targets for reducing overall carbon dioxide levels are an 80% cut on 1990 levels by 2050; 34-42% by 2020. In the 1990s, UK per capita carbon dioxide emissions equalled over 10 tonnes per person annually.

If the population remained stable, then the necessary cuts per person to meet those targets would be of the order of 2 – 3 tonnes for each person. But if the population grows by 10 million as predicted, a cut of at least an extra tonne per person will be required.\(^{19}\)

The additional greenhouse gases resulting from those extra 10 million people would, if renewable energy were used, require an extra 27,000 wind turbines just to keep emissions at ‘stand-still’.\(^{20}\)

\[ I = P \times A \times T \]

Our impact on our planet is a combination of factors:
- Overall human numbers
- The amount each of us consumes/demands of the Earth
- Available technology and its efficiency to provide the goods and services derived from the Earth’s resources.

Those three factors have been combined in the equation formulated by Paul Ehrlich and John Holdren: \( I = P \times A \times T \) – in which impact \( ‘I’ \) is a factor of population \( ‘P’ \), affluence \( ‘A’ \) and technology \( ‘T’ \).\(^{21}\)

To reduce the impact on our planet, we can potentially intervene in three ways: curb consumption; improve efficiency of resource use; slow and stabilise population growth. Exclude the \( ‘P’ \) (Population) factor and you load even greater expectations on changing consumption habits (Affluence) and upon the ability of science and technology to deliver ever greater efficiencies (Technology).

**Limits to efficiency**

When the 18th century cleric and political economist, Thomas Malthus wrote his essay on ‘The Principles of Population’ in 1798 with its grim predictions that human numbers would overtake our capacity to feed ourselves – bringing war, famine and plague, he did not foresee the impressive advances in human ingenuity, especially agricultural technology and the development of birth control methods. Agricultural advances that enabled farmers to achieve exponential increases in yields and, along with birth control, dispelled Malthus’s bleak, joyless (his proposed solution was sexual abstinence) view as irrelevant and merely of historic interest.

Through the use of new high-yielding varieties of wheat, rice and other staple crops allied to greater mechanisation, irrigation and increased use of artificial fertilisers and pesticides, the ‘Green Revolution’ tripled world food production over a period of thirty years running from the 1960s to 1990s. But since the 1990s, crop yields have stopped rising (claims made for genetically modified crops have not been yet realised), and many plant breeders believe that the physiological limits for any further yield increases have been reached for most crop plants. US Department of Agriculture plant scientist Thomas R. Sinclair observes that, “except for a few options which allow small increases in the yield ceiling, the physiological limit to crop yields may well have been reached under experimental conditions.”\(^{22}\)

Even if they haven’t, the increased yields achieved from intensive agriculture have not been achieved without considerable cost:
- The UN estimates that half of the world’s current arable land will be ‘unusable’ by 2050 due to desertification and soil degradation\(^{23}\)
- Soil erosion and degradation affect 157 million hectares of Europe’s farmland (16% of total European land area)\(^{24}\)
- A review by the Environment Agency in 2004 reported that soil organic matter (a key indicator of sustainability and fertility) had continued to fall over the period studied of 1979 -95 and that 17% of soils in England and Wales were prone to erosion.\(^{25}\)

References
\(^{19}\) Growing pains, population and sustainability in the UK, forum for the future, June 2010.
\(^{20}\) Running up a down escalator, UK population growth to 2033 – the taxpayers’ and planet’s bill, LSE MSc dissertation for Population Matters, September 2010.
\(^{21}\) http://www.ecoglobe.org/population/vagerley/ipat.html
\(^{24}\) Conservation Agriculture in Europe, European Conservation Agriculture Federation, 1999.

8 Why *population matters* for CPRE
The capacity of the world’s soils to feed the planet’s burgeoning population is as relevant to us in the UK as the state of our own soils and their ability to feed our own growing numbers of people – given the UK’s dependence on imported foodstuffs, with 40% of all the food we eat grown overseas.26

The ‘food footprint’ of London alone is some 20,035,000 hectares – two million more hectares than all available farmland in the UK – making it clear how dependent we are on ‘ghost acres’ overseas to feed our population and how vital it is to sustain the remaining area and health of our farmland as a key strategic resource.27

Globally, the area of land viable and available per person for food production has declined due to soil degradation and population growth from 0.32 hectares per person in 1975 to 0.25 hectares in 2000. To produce our typical western diet takes 0.6 hectares per person.28

Feeding over 9 billion people is going to challenge human ingenuity, let alone raising everyone’s quality of life to that enjoyed by those of us in the developed world, as Professor Tim Jackson, Economics commissioner for the Sustainable Development Commission makes plain in his book, ‘Prosperity without Growth’, “If 9 billion people aspired to live at the level of affluence achieved in the OECD nations, the global economy would need to be 15 times the size of this one by 2050 and 40 times bigger by the end of the century.”29

Because consumption per capita continues to be so high in countries like the UK and America, the missing or ignored factor of population has to be addressed – as each additional consumer in the developed world makes a globally disproportionate impact.

A study by Oregon State University in 2009, comparing the impact of an individual adopting six life-style changes to cut their carbon budget over a lifetime, against the single action of having one less child, bears this out:

- By adopting the practical and available ‘environmentally-friendly’ actions of driving a more fuel-efficient car; halving annual car mileage; fitting double-glazing and low-energy light-bulbs; replacing an older, inefficient refrigerator; recycling all paper, tin and glass - an individual over their lifetime could curb their carbon budget by 486 tonnes
- By taking the single, personal decision to have one less child, a woman and her family would save 9,441 tonnes of carbon over her lifetime.

Nearly 20 times the amount saved from all other positive eco-actions combined.30

References
29 http://www.sd-commission.org.uk/publications.php?id=914

215 million women worldwide can’t access the safe contraceptive methods they want.
“We are possibly the only green group which has a completely holistic approach.”
CPRE, Our Vision

The definition of ‘holistic’ is a view or analysis that is comprehensive and all-encompassing, “based on the knowledge of the nature, functions, and properties of the components, their inter-actions and their relationship to the whole.”

But CPRE’s approach cannot be said to be holistic if it excludes a proper and thorough consideration of the key factor of population.

One of the few references to population linked to CPRE is to be found in Chief Executive Shaun Spiers’ short response to Sir David Attenborough’s Royal Society of the Arts lecture of 2011. “CPRE has always acknowledged that population growth has environmental consequences, but we have chosen to focus on how people use land and other natural resources, not how many use them. That is where our knowledge lies and that is where we feel we can have most impact. Immigration and birth control lie beyond our expertise and charitable remit.”

The obvious response is that CPRE should build its expertise and expand its charitable remit. Population is indeed a complex and ‘difficult’ issue to deal with, particularly in a crowded, multi-ethnic country like the UK and where net inward migration has been one of the main causes of overall population growth over the past two decades. All the more reason for a respected, rational, representational body such as CPRE to grasp the nettle. By not doing so CPRE and the other mainstream NGOs leave a vacuum to be filled by unrepresentative groups with overtly political aims, who are enabled by genuine public concern to promote their own dubious agendas.

Confronting the challenges presented by an increasing population in the UK and globally is central to achieving CPRE’s vision and wholly relevant to its remit.

CPRE’s expertise and influence is needed to ensure an informed, rational debate around the carrying capacity of England such that it can meet the needs of present and future generations of all its citizens – whilst protecting the vital resource of England’s countryside, its biodiversity and natural resources for the well-being of all.

Population is an issue of public concern

CPRE and other NGOs should take heart from the fact that a large proportion of the public are concerned about the growth of populations in the UK and globally:

- A YouGov survey carried out in May 2011 of 3,538 UK adults found that almost four out of five (79%) thought the UK population was too high, with almost half (45%) saying it was much too high;
- Over four out of five (84%) thought the world population was too high; with over half (53%) thinking it was much too high.
“At present there are no well-charted ways for 10 billion people to achieve lifestyles like those enjoyed in the Most Developed Countries, because the only known way forward is economic growth, and that will come into collision with the finite earth. Technology can help, but without socio-political change it cannot solve. There is much work to be done.”

People and the planet, Royal Society, 2012

There is an additional task that runs in parallel with the need for CPRE and all environmental NGOs to be more active and outspoken on the issue of population and that is to challenge the delusion of limitless growth on a finite planet.

Conventional ‘classical’ economists in the western developed countries look to constant growth in consumption and consumers as the only means to maintain a vibrant economy and to provide the care and services required by increasingly, ageing domestic populations. The growth of the consumer class globally is seen as a good thing – even if the UK is no longer making the majority of the products those new consumers may want, we may be able to sell them the technical know-how to develop their manufacturing base and the financial services to capitalise their assets within the global stock markets.

A concerted and united effort is required from CPRE and all environment NGOs to challenge the conventional model of economic growth and propose alternative models that redefine human well-being and quality of life in terms of “a much broader basket of economic, social and ecological factors”.

References


Over the past century, an average 6,500 hectares of land has left agriculture every year most going for built development.

England’s people density is over 400 per square kilometre – rivalling Holland to claim the title of, ‘most densely populated country in Europe.’
“All environmental problems become harder – and ultimately impossible – to solve with ever more people.”

Sir David Attenborough

Take action

Given the evidence summarised here, we ask CPRE to add its respected voice and considerable influence to ensure the findings and implications of the Royal Society and Living Planet reports are understood by the public and acted upon by policy-makers.

And commit to the following actions:

• Accept and promote the findings of the Royal Society’s People and planet report that Population and Consumption must be considered as indivisible, linked issues

• Acknowledge publicly and actively communicate the crucial relevance of population to CPRE’s mission and objectives

• Support and advocate the principle of universal access to safe, affordable family planning for all women throughout the world

• Call on the Government to act on the findings of the Royal Society’s report and draw-up a national population policy

• Use its considerable policy resources, voice and influence to speak out and engage its members and the wider public in an intelligent, informed and honest debate about the Population issue

• Include the ‘P’ factor in all its relevant public communications and policy pronouncements i.e. accept the full formula I = P x A x T.

Find out more

Further information on Population issues can be found at:

www.unfpa.org
www.populationmatters.org
www.appg-popdevrh.org.uk

This briefing is an independent production written and researched by Robin Maynard and designed by Sam Allen, December 2012. It is NOT an official CPRE publication.

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