**ID Number: 277**

# Faced with today's food and energy crisis, how can society improve its well-being?

## Summary

"I'm not a pessimist, even though I do think awful things are going to happen" - James Lovelock

Humanity is currently experiencing an unprecedented golden age, largely based on tremendous growth in the use of fossil fuels. However, we face a multifaceted energy and food crises that threatens to end this golden era...or does it? Do we really need ever increasing amounts of energy to improve our well-being? Or have previous generations got it wrong? Instead of entering into a double bind in our futile pursuit of GDP, we should focus on what really matters – well-being itself.

## Essay

For the past sixty years we, humanity, have experienced an unprecedented golden age. Our numbers have increased from 2.5 billion in 1950 to 6.7 billion today, while we have simultaneously increased life expectancy and prosperity around the world. Across most measures of well-being, including access to education, intake of calories per day, and hours worked per day, the situation has drastically improved in developed and developing countries alike[i]. The UN's Millennium Development Goals highlight there are still severe problems to be addressed, but we have achieved much. This tremendous growth and abundance has been based on access to cheap, plentiful energy, primarily in the form of fossil fuels. However, we face multifaceted and interlinked energy and food crises that threaten to end this golden era.

Today's food and energy crises are threefold crises of supply, distribution, and pollution. These three elements are interlinked with feedback mechanisms ensuring that apparently simple, single solutions are unworkable. Instead, a more holistic, systems thinking approach is needed to avoid what Einstein named the *double bind* – we cannot solve our problems with the same mindset that created them in the first place.

In supply, we face shortages of water, productive arable land, and many other natural resources. One of the most pressing of which is the imminent and irreversible shortage of oil supply, known as *peak oil*. This threatens to make oil prices increasingly volatile, which as shown in 2008, can have devastating impacts on well-being. The higher oil prices raised the cost of fertilisers, transport, and industrial agriculture, contributing to dramatic rises in food prices and creating political, social and economic instability around the world.

However, the food and energy problems that we face are generally not caused by a lack of total food and energy, but by a lack of access to them, reflecting broader inequalities and bad governance within and between countries. For example, oil-rich African countries have no excuse for their citizens' energy poverty.

Despite this, it is the crisis of pollution that threatens to have the longest lasting negative impacts on well-being in the form of climate change. James Lovelock, creator of the Gaia hypothesis, believes we have already passed the point of no return, with feedback mechanisms that regulate the planet now accelerating the warming process. According to Lovelock the human race will be reduced by 80 to 90% by the end of the century, with survivors migrating to Arctic regions[ii]. Even if this is an overly gloomy assessment, it is widely recognised that to avoid *runaway climate change* global greenhouse gas emissions must peak in the next 10-20 years. The UN climate change talks in Copenhagen 2009 provide a window of opportunity to reach an effective international deal, but this will require a political step-change and strong leadership from both the United States and European Union. If we fail to tackle climate change there is no hope of improving well-being in the long term.

In truth, the drive towards sustainability should have started with a bang 30 years ago and now be well advanced. Instead, short-term, selfish, interests were placed first, and the current generation has been left with a narrow and shrinking opportunity to secure the future. Instead of seeking to maintain the flawed business as usual scenario, we should use the current financial crisis to rewrite the rules of the game.

The biggest single change that will improve well-being is to abandon our strange addiction to GDP as a measure of success. Any measure that counts resource depletion as a positive factor and takes no account of income distribution is clearly not fit for purpose. In the UK and elsewhere, GDP has risen consistently since 1970, while levels of life satisfaction have remained exactly the same[iii]. We should no longer pursue economic growth at the expense of all other concerns, but concentrate on what truly improves well-being. Other measures such as the Index of Sustainable Economic Welfare (ISEW), Happy Planet Index (HPI), and Bhutan's Gross Domestic Happiness, offer possible alternatives. Time and again, studies highlight seven key factors which affect our happiness: (1) Family relationships; (2) Financial situation; (3) Work; (4) Community and friends; (5) Health; (6) Personal freedom; (7) Personal values[iv]. Viewed from this angle the energy crises become less daunting. We need plentiful energy to increase economic growth under the current model, but if we focus on what is really important for well-being plentiful energy becomes less crucial.

Once we have changed the metrics, and start measuring what is important, other necessary changes will naturally follow. The era of unbridled, deregulated free-markets as envisaged by Milton Friedman and promoted by the IMF has had its day. Everywhere it was implemented levels of well-being dropped, while wealth concentrated in the hands of a few individuals[v]. A move towards the Scandinavian model of capitalism and participatory democracy should be promoted, as these countries consistently achieve the highest levels of personal and social well-being in the developed world[vi].

For billions of people in the developing world the challenge is to improve access to food and energy and achieve a basic standard of living. 1.6 billion people have no access to electricity. Both strong policies and technology are needed. For example, any future UN climate change deal must improve equity, with the costs of mitigation based on ability to pay and historical responsibility. New technologies such as International Energy Networks as promoted by GENI and DESERTEC offer possible solutions to

both energy inequality and fossil fuel dependence[vii]. These improvements in equity would be prioritised under a well-being metric, as increases in well-being for the happiest have less value than increases for the unhappiest.

However, first we must change our mindset and avoid Einstein's infamous *double bind*. Food and energy crises or not, the only way to improve our well-being is to abandon our futile pursuit of economic growth and GDP, and focus on what is really important – well-being itself.

---

i See Lomborg, B. (2001) *The skeptical environmentalist: Measuring the real state of the world*, Cambridge University Press: Cambridge

ii Lovelock, J. (2006) *The revenge of Gaia: Why the earth is fighting back – and how we can still save humanity*, Pengiun: London

iii Porritt, J. (2007) *Capitalism: As if the world mattered*, Earthscan: London

iv Layard, R. (2005) *Happiness: Lessons from a new science*, Penguin: New York

v See Klein, N. (2007) *The Shock Doctrine*, Penguin: London

vi NEF (2008) *National Accounts of Well-being report*. Available at: http://www.nationalaccountsofwellbeing.org/

vii See www.geni.org and www.desertec.org