

2019-04-02

# Sustainability of equality: a paradox for democracy

Burr, Steven

<http://hdl.handle.net/10026.1/14699>

---

The Journal of Population and Sustainability  
Population Matters

---

*All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.*

# Sustainability of equality: a paradox for democracy

Steven A Burr, Katie S McManus & Yee L Leung

Steven Burr is an associate professor at Peninsula Medical School, University of Plymouth, UK. Katie McManus is equality and inclusion officer in the Faculty of Medicine & Dentistry at the University of Plymouth, UK. Yee Leung is a consultant surgeon at Musgrove Park Hospital, Taunton, UK.

There are too many people in the world: we all know it, but there are perverse incentives preventing us from doing anything about it. Democratic ideals, resource mismanagement, human adaptability and scientific advances, all play a role in deciding whether equality of resource consumption within our world population is sustainable in the present age. There are a couple of axioms that need to be accepted: (1) the planet has finite inhabitable space and resources, and (2) the human population cannot continue to expand indefinitely. The global human population is currently 7.6 billion (Cohen, 2017; World Population Clock 2018). The maximum sustainable global human population has been conservatively estimated to be 10 billion (United Nations 2001), and is expected to exceed this between 2050 and 2100 (United Nations 2017a). Any population expansion clearly has implications for standards of living and quality of life, but with continued growth even the minimum survival needs of everyone living on our planet will soon outstrip its capacity to provide. It follows that we must actively control population or face disaster (Higgs, 2017). However, this requires political intervention without allowing the adoption of a eugenics agenda. We argue that democracy, through the welfare state, can lead to a greater degree of economic and social equality. This economic and social inequality has a tendency, through rising incomes, higher levels of education, and the greater emancipation of women, to reduce fertility rates. However, we also argue that in terms of achieving an environmentally sustainable population that, due to a number of individual and political interests, liberal democracy appears unlikely to develop policies to safeguard population sustainability on a global scale.

The inability to sustain the environment is a consequence of human dominance and mismanagement of the resources available. Human overpopulation is the root cause of all environmental sustainability problems. For example, if there were no humans there would be no environmental pollution or resource problems. We know with logical certainty that natural population controls will eventually be catastrophic, unless there is intervention to ensure otherwise. Think of Easter Island on a global scale (Brandt and Merico 2015). Modern advances in medicine, democratic pressure for improved public health and welfare measures, along with increases in incomes have to some extent circumvented natural controls of lifespan. Despite this, increasing competition for finite resources must still ultimately lead to substantial global death tolls through famine, disease, and war. The only alternative to letting nature take its course and controlling population through death, is to prevent further increases in competition by reducing birth rates. Thus, the provision of a high quality of life for the world's current population through the mutual sharing of global resources is expounded and promulgated.

It appears somewhat paradoxical that in many cultures as the quality of life increases the birth rate decreases. This is due in part to less reliance on one's own children for care and security in old age, coupled with opportunities to pursue personal ambition. However, since current levels of resource consumption are unsustainable, providing the quality of life which most in the global north take for granted for the whole of the world's current population is

obviously not possible. Even if resource consumption is reduced to sustainable levels, more equitable sharing of resources in the absence of adequate family planning and a reduction of global population, cannot achieve both high standards of human welfare and environmental sustainability. Clearly, we need to reach a global agreement to restrict conception; ideally through education about family planning, encouraged by incentives that are proportionate to the environmental costs. We will have to do this eventually unless pollution leads to widespread infertility (Joffe 2003; Lebine et al. 2017). Better that we start now to give time to develop, agree and refine a worldwide approach before it is too late. The political appetite to control the size of populations has publically declined, despite increased promotion of other environmental safeguards (e.g. against global warming, United Nations 2017b; and oceanic plastic, Ocean Cleanup 2018). There is insufficient appreciation that while environmental problems are the result of human behavior, population is a multiplying factor. Thus, at levels of consumption compatible with human welfare there are too many people for a finite space and the associated natural resources. One person disposing of waste in a thousand acres is an ecological opportunity by opening niches to increase biodiversity (Shea and Chesson, 2002; Chase and Leibold 2003). Whereas, a thousand people carefully using resources and responsibly disposing of waste in one acre is a disaster for the natural environment. To think that we might manage to somehow pull off some technological trick in the future so that billions of people could all have an equally good quality of life while preserving pristine environments and retaining species diversity is a logical absurdity.

Managing population growth will reduce competition for resources and improve environmental conditions, and thus facilitate sustainable levels of global health, affluence and well-being. While there is a clear imperative to reduce the global population load on the earth's resources, there are numerous ways this might be achieved without draconian coercion (Coole, 2018). However, waiting to see if passive methods will check overpopulation is a high stakes gamble. If these methods are likely to be insufficient then coercion must be considered. An escalating scale of rewards is preferable to sanctions and in turn compulsion; and decreasing fecundity (the number of offspring) is preferable to decreasing fertility (the ability to have offspring) as a means to control procreation. Coercion can only be achieved through politicians agreeing new laws (Maxton & Randers, 2016), which will lead to new welfare and healthcare policies targeting demographic goals. This would need to have a dramatic impact on the working practice of some medical specialties, for example general practice, psychiatry, obstetrics and gynecology, and especially the subspecialty of reproductive endocrinology and infertility. It is clear that any attempt to actively control family size would directly challenge the core ethical tenet of personal autonomy, and also conflict with some religious beliefs and cultural norms. Coercion runs against the current trend of increasing individual rights over collective responsibility, but with individual rights come responsibilities to society (Mill, 1859). How can reproductive freedom be permitted if uncontrolled reproduction increases the global resource debit, increases misery, and ultimately leads to the destruction of society? To prevent a global social calamity there does need to be a fundamental shift in our expectations of self-determination, and a move towards selflessness and altruism for the sake of humanity. Uncontrolled reproduction disadvantages everyone, but there is insufficient incentive for individual restraint unless everyone is regulated (Hardin, 1968). Therefore, it is necessary to apply sanctions to prevent harm to others.

The ideal is to find a combination of non-coercive measures that would reduce fecundity below the level required to maintain the current population; thus reducing human numbers to a level that can be sustained, with a high quality of life, by the planet. However, the situation *is* bad enough to require coercion (Sen, 1996); if we wait for panic then there will have been too much suffering and irreversible damage to society and the environment. While coercion towards single child families (Conly, 2016) seems an excessive approach to achieve a sustainable population, ruling out directly coercive policies as advocated by Coole (2018) does not seem 'politically sensible', because indirect coercive measures are counter to democratic self-interest and thus unlikely to succeed. The challenge is to bring about a stable lower global population through an escalating combination of soft and hard coercive measures (Cripps, 2015), without victimising the vulnerable. It would be counterproductive if: (1) Having multiple children is disproportionately more expensive for parents, as those children will then be disadvantaged; and (2) The only prospect to fulfil your own ambitions is through your children, as procreation is surely encouraged. Clearly, population control is predicated on establishing equal life chances for everyone, through the fair distribution of resources and opportunities. Our global society needs to change radically, with each living individual valued as equivalent.

Unfortunately, there are considerable obstacles restricting our ability to control our own population. For example, China's one child policy (1979-2015) (Roche, 2017) failed partly because boys were (and still are) more valued than girls (Fong 2015). The implication is that the policy would have worked if there were complete equality. It is also true that equally valuing those with disability, and older people, would bring a positive perspective to the different types of support required by all subgroups of the population. While liberal democracy is arguably the most powerful method to ensure equality (both political and of social and economic opportunity), it may also unintentionally be a powerful force against population control. In the developed world, family size has become defined as an entirely private and self-regarding matter and politicians meddle in such things at their peril. Moreover, the issue of how to pay for an aging population can lead for a call for higher levels of fertility or increased migration. Indeed, South Korea has introduced incentives to increase the country's birth rate (Kwang-tae 2017). This short-termism, motivated by the short duration of most political offices, may unwittingly be increasingly compromising our long-term quality of life and survival prospects. Ergo, liberal democracy as we currently practice it is not conducive to environmental sustainability.

In theory, equality is a prerequisite for an effective population control policy, and democracy promotes equality, but while personal autonomy regarding choice of family size remains an unquestioned basic right, liberal democracy is antithetical to population control. Why is there inaction? Populations feel powerless as individuals and have no forum to unite. Decision makers are motivated by typical voting cycles of only a few years. Those people who possess the most do not want to see their living standards decrease. Lifestyle practices are often geared towards immediacy rather than being forward looking. Environmental damage due to inaction is more likely to adversely impact future generations rather than the current generation. Clearly most politicians and wealthy individuals have conflicted interests and are probably complacent about the sustainability of the planet's human population or too cowardly to admit the enormity of the problem. With our future existence at stake, the international community should be earnestly discussing these obstacles and debating potential solutions. For example, should we be drafting

a model theoretical policy that challenges the longstanding international human right (United Nations 1966) to determine one's own family? No doubt, this would be extremely difficult and unpopular, but less difficult and unpopular than what will happen if we do nothing. If we do not find a way to agree to control the human population peacefully then we risk having no future for humanity at all.

## References

Brandt, G., and Merico, A., 2015. The slow demise of Easter Island: Insights from a modeling investigation. *Frontiers in Ecology and Evolution*, 3(13): 1-12. <https://doi.org/10.3389/fevo.2015.00013>

Chase, J.M., and Leibold, M.A., 2003. Ecological niches: linking classical and contemporary approaches. University of Chicago Press, 212p.

Cohen, J.E., 2017. How many people can the earth support? *The Journal of Population and Sustainability*, 2(1): 37-42.

Conly, S., 2016. One child: do we have a right to more? Oxford: Oxford University Press, 264p.

Coole, D., 2018. Should we control the world population? Cambridge: Polity Press, 138p.

Cripps, E., 2015. Climate change, population and justice: hard choices to avoid moral consequences. *Global Justice: Theory Practice Rhetoric*, 8(2):1-22.

Hardin, G., 1968. The tragedy of the commons. *Science*, 162(3859):1243-1248.

Higgs, K., 2017. Limited to growth: human economy and planetary boundaries. *The Journal of Population and Sustainability*, 2(1): 15-36.

Joffe, M., 2003. Infertility and environmental pollutants. *British Medical Bulletin*, 68: 47-70.

<https://doi.org/10.1093/bmb/ldg025>

Kwang-Tae, K., 2017. Young Koreans given various incentives to have more babies.

<http://english.yonhapnews.co.kr/national/2017/01/12/0302000000AEN20170112010700320.html>

Levine, H., et al., 2017. Temporal trends in sperm count: a systematic review and meta-regression analysis. *Human Reproduction Update*, 23(6): 646-659. <https://doi.org/10.1093/humupd/dmx022>

Maxton G. and Randers J., 2016. Reinventing prosperity – managing economic growth to reduce unemployment, inequality and climate change. Vancouver: Greystone Books, 272p.

Mill, J.S., 1859. On liberty. London: J.W. Parker & Son, 207p.

Roche, J., 2017. Beyond the one-child policy: a response to Conly. *The Journal of Population and Sustainability*, 2(1): 61-72.

Sen, A., 1996. Fertility and coercion. *University of Chicago Law Review*, 63(3):1035-61.

Shea, K., and Chesson P., 2002. Community ecology theory as a framework for biological invasions. *Trends in Ecology & Evolution*, 17(4): 170-176. [http://dx.doi.org/10.1016/S0169-5347\(02\)02495-3](http://dx.doi.org/10.1016/S0169-5347(02)02495-3)

The Ocean Cleanup, 2018. System 001. <https://www.theoceancleanup.com/>

United Nations, 1966. Population Division: Reproductive Rights.  
<http://www.un.org/en/development/desa/population/theme/rights/>

United Nations, 2001. Department of Economic and social Affairs, World Population Monitoring. p.31.  
<https://www.un.org/esa/population/publications/wpm/wpm2001.pdf>

United Nations, 2017a. Department of Economic and social Affairs, News: World population projected to reach 9.8 billion in 2050, and 11.2 billion in 2100. <https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html>

United Nations, 2017b. Climate Change conference COP23, Bonn (Germany). <https://unfccc.int/process#:606038e4-000c-47ee-8c49-4f590df37224:c4431ae4-51ce-46e6-98f8-941fa7f54562>

World Population Clock, 2018. <http://www.worldometers.info/world-population/>