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Less Is More

Contribution to GTI Forum [The Population Debate Revisited](#)

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I would like to begin by extending appreciation to [Ian Lowe](#) for setting the stage for a lively exchange. My comment is motivated by the normative consideration of overcoming the rancor surrounding the population question. I argue for reframing certain aspects of population in ways that might uncontentiously demonstrate that ending and gradually reducing our numbers serves the long-term well-being of all.

Decoupling immigration politics from the population question. It is advantageous to approach population as a global issue, excluding immigration discourse from bearing on population matters. When immigration-restriction measures are proposed as means to address overpopulation, the population conversation screeches to a halt amidst allegations of racism, xenophobia, and the like. We can unite in advocating for the *active pursuit* of certain human rights that reverse population growth (more below), without the monkey wrench of immigration thrown into the works. Space precludes me from rehearsing the arguments against immigration restriction as population policy, but I have published them elsewhere.¹

Children's rights, women's empowerment, reproductive freedom, and comprehensive sexuality education are the way. Not bogging down the population conversation with the barbed politics surrounding immigration is no mere tactic. Transitioning to a smaller, more sustainable global population is realizable by the same set of transformations in all societies: zero tolerance of "child brides"; education through (at least) secondary schooling for girls; women's empowerment, viz., access to higher education, meaningful employment, and leadership careers; voluntary family planning services and contraceptive choices; and removal of physical, social, and cultural barriers

to them. To these established population-related human rights, we must add comprehensive sexuality education (CSE), which can play a significant role in population degrowth. CSE lowers the rate of unintended pregnancy, alongside other remarkable quality-of-life benefits.²

The rights of girls and women are pivotal for transitioning to a smaller population. When women are educated and empowered, they generally choose fewer or no offspring regardless of their background. When women become free to choose their reproductive destiny, what Martha Campbell has called their “latent desire” for fewer children surfaces.³ There is an evolutionary reason for this: pregnancy and child-bearing are challenging to women’s bodies. Bearing numerous children, especially starting at puberty and closely spaced, correlates with increased maternal mortality.

Sexist pressures of coercive pronatalism are present not only in the developing world. Whether subtle or strong-armed, pro-child-bearing sociocultural norms are widespread across Global North and South. Pronatalist pressures on women deserve to be exposed and confronted.⁴

Consumption is the problem—population scales it up. A standard framing that begs rethinking is the juxtaposition of “consumption” and “population” as distinct variables of impact. This misleading quandary effectively goads people to choose which one is The Problem. Understandably, many choose to castigate affluent overconsumption while dismissing population size and growth. This received dilemma is obfuscating. Excessive consumption is the problem; population growth spirals consumption upward and eventually out of bounds.

To drive the point home, imagine a counterfactual. Were humans “breatharians”—able to get their energetic requirements solely from breathing—and inclined to voluntary simplicity, human numbers would hardly matter. Earth could sustain many billions of breatharian minimalists. Back to reality, all people need to eat and most like to eat at least twice daily. More to the point, everyone should be eating more than once a day and eating *good food*. In an electrified and interconnected global civilization, people of course consume many more things than food. In this comment, I focus on the population question mostly through the lens of food.

The food system (production, consumption, processing, and trade) has emerged as leading cause of ecological deterioration at every level: extent of land use and ocean use, biodiversity

collapse, soil loss and degradation, freshwater depletion, climate change, and pollution of land, freshwater ecosystems, coastal seas, and atmosphere.⁵ Such breadth of impact is unsurprising, for food is where human population size/growth, consumption patterns, and technology regimes commingle in adverse synergies.

Can we stop framing the Green Revolution as a “technical achievement”? I wish we would forsake the compulsory deferential nod to the Green Revolution. Notwithstanding original good intentions, short-term benefits, and impressive yields, the Green Revolution has unleashed a Pandora’s Box of disastrous harms. Its monocultures destroy biodiversity. Agrochemicals endanger soil biodiversity, plant and insect life, birds, and other animals including people.⁶ Synthetic fertilizers dismantle soil biodiversity; exacerbate climate change, pollute air, land, freshwater, groundwater, and estuaries; and can cause wildlife mass mortality events. While quantity of food has skyrocketed (for now), quality of food (especially food pushed on disempowered people) has plummeted. Over 2 billion people (both underfed and overfed) suffer from micronutrient deficiencies.⁷

The Green Revolution has underwritten the explosive growth of the human population. The existence of nearly half the population is indebted to Green Revolution technologies, most especially fertilizers.⁸ It is a Faustian deal. The Green Revolution’s toll on the biosphere is escalating at the interrelated levels listed above. Glyphosate is in the rain. Nitrogen pollution is a mounting catastrophe that remains under the radar with most eyes glued on carbon.⁹ Pollinators are imperiled. Monocultures are more vulnerable to a rapidly changing climate.

While better management of Green Revolution inputs is immediately needed, restoring the health of the biosphere and humanity *need not be envisioned* as an exercise in damage control of an inherently detrimental food-production system. The deep solution is to back out of this way of making food, alongside gradually lowering human numbers to where all people can be supported with wholesome food: food that is ecologically and ethically produced, uncontaminated by biocides, and nutrient-rich from healthy, regenerated soils.

Growing food is not an engineering problem for technocrats to solve with efficiency schemes and micromanagement. Growing food is the art of farmers in dialogue with Earth’s bounteous fertility.

Less is more: a population of ~2 billion is better for all and for the long term. Earth knows fertility, and farmers know how to work with that gift to nourish people. We should dispense with the trope of “feeding the world.” Humans are not to be fed—but nourished with food made with love for animals and land, grown for quality more so than quantity, and crafted by farmers in artful relationship with the surrounding wild.

So, how many people can Earth nourish? That question begs a critically important clarification. *On what kind of planet?* Earth keepers submit that the virtuous and prudent choice is a planet whose remaining biodiversity, abundance of nonhuman populations, ecological complexity, behavioral liveliness (like animal cultures and migrations), and evolutionary potential are preserved. All these require large-scale conservation of land and seas, ending tropical deforestation, proliferating projects of rewilding and ecological restoration, and phasing out agrochemical and other pollutants. Expansive wild nature protection and agrodiverse “middle landscapes” (where food is produced) are benignly synergizing—as long as the middle landscapes form a modest subsystem of the planet rather than overrunning it.

When David Pimentel did the math of how many people can be equitably supported by organic, diverse, mostly plant-based food, while simultaneously protecting wild nature generously, he estimated 2 billion.¹⁰ Such a number is neither absolute nor a “quick fix.”¹¹ It offers a mid- to long-term vision to be tackled promptly and ambitiously within a human-rights framework, alongside many other transitions our predicament demands.

What will humanity choose? Besides needing healthy food, most people in the modern world also want (inter alia) personal computers, refrigerators, indoor temperature control, entertainment technologies, transportation means, and a material ensemble of healthcare, educational, and other services. We can leave aside whether these are industrial luxuries, sought-after comforts, or manifestations of our species potential worth sustaining in altered and downscaled forms. What we can agree on is that modern amenities should not be a boundless privilege of the affluent, but a prerogative of all who want them at moderate, just levels.

To this point, the modern lifestyle is spreading, which underscores the argument: There must be far fewer of us, *if* humanity also desires to inhabit a biologically vibrant planet. If, on the other hand, humanity drifts toward turning Earth into a resource colony, that impoverished planet might (for some indeterminate period) “feed” many billions of humans, while swelling the riches of amazon.com, big-box stores, agrochemical corporations, Big Pharma, and the military-industrial complex. Given a vote, would not humanity choose a living planet over a colonized one? We stand at the juncture.

Endnotes

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