Is the world overpopulated?

BY PETER SCHWARTZMAN AND DAVID SCHWARTZMAN

Homo sapiens now number 6.6 Billion. In the U.S., we just passed the 300 million threshold. These numbers convince many that the root cause of the sorry state of society and nature is overpopulation. Mainstream media have been telling us this message for a long time. Are you convinced?

It is rather easy to look at big numbers or images of a crowded street (likely in cities of Asia or Africa) and think that population size must be a major contributing factor in the development of our current woes. Isn't this why so many are hungry, sickly, and poverty-stricken? While this is the recurrent message we hear, it is largely untrue. There are many reasons why so many suffer but overpopulation is probably only a small and highly exaggerated part of this story. For example, the key reasons have more to do with us (the 18% living in the "developed" world) than them (the 82% living in the "developing" world). Coming to understand the reasons why humans are suffering and ecosystems are collapsing is paramount. Blaming others may be easy but it isn't productive.

CARRYING CAPACITY

First, the argument for overpopulation rests on the position that human populations (in cities, in nations, and in the world as a whole) have exceeded their "carrying capacity"—defined as the maximum population size that can be maintained into perpetuity given the resources and ecological services available. Locally (as in cities) this is definitely true; multi-million people cities cannot survive on the food and resources that are available locally. Despite this, some large cities see the bulk of their residents living relatively happily and healthily. This is only possible because resources from elsewhere serve the needs of these urban dwellers. Since so many are able to live far from where resources are found, this begs the question, "Are we living beyond the carrying capacity at the global level?" Recent work by Wackernagel and Rees on human's ecological footprint suggests "yes," we are—and this evidence seems to be just what the population reductionists have been looking for as proof of "global overpopulation." However, carrying capacity is a dynamic concept, something these reductionists overlook. Specifically, if the 6+ billion humans on the planet today were to shift from using heavily polluting energy sources to clean ones, our collective impact would be less. Cleaning up polluted environments would likewise increase the carrying capacity of the planet.

DEMOGRAPHIC SNAPSHOT

Currently 41% (2.7 billion) of the world's population live in four Asia countries—China, India, Pakistan, and Bangladesh. The world's human population has doubled since ~1965 and more than tripled since ~1930. However, population growth rates (i.e., the yearly percentage increase that the population grows) are currently at 1.2%, far smaller than their peak of 2.2% in the early 1960's. In 1950, the average adult woman was having 5 children during her reproductive life, now she is having almost half of that number (2.7). Population densities vary greatly throughout the world, with large densities found in "rich" countries (e.g., Japan has 880 people per sq. mile, The Netherlands has 1,030) and "poor" countries (e.g., China has 350 and Bangladesh has 2,540). Nutritionally, about 18% of the world's population suffer from chronic malnutrition, 50% from micronutrient deficiency, and, perhaps most revealingly, 18% from the overconsumption of food.

To be sure, the world and especially urban areas in countries of the South are overpopulated, but only in the context of the carrying capacity of the present political economy in this world of extreme inequalities and not the alleged carrying capacity of the biosphere. Many cities in the global South are overpopulated, bursting with poor residents driven from rural areas as a result of the social impacts of the so-called green revolution and structural adjustment programs imposed by the International

Monetary Fund (IMF). But other regions are actually now under populated, such as rural areas in countries of Sub-Saharan Africa, devastated by AIDS, with population size arguably too low to restore and maintain sustainable agricultural production.

Yet, despite the conflicting evidence presented, it is commonly believed that overpopulation is some absolute phenomenon and will only get worse in the future. There are two fundamental reasons why this conclusion is highly misleading. One, the root cause for widespread misery and environmental degradation is the mode of production and consumption we have in the U.S. and the global system that maintains it. Two, the overpopulation myth leads to the promotion of policies that are terribly unjust and inhumane. Now to the evidence . . .

WHY HUNGER?

People aren't hungry because there isn't enough food. People are hungry and malnourished because they aren't getting the food that exists. On a world scale, there is more than enough food to feed everyone, although the dominant mode of agricultural production has huge negative impacts on humans and nature. Massive starvation, as observed in Ethiopia in 1973 and Bangladesh in 1974, didn't occur because food wasn't available. These famines, and many others, occurred because large numbers of the population didn't have sufficient funds to purchase foods, even though food was available–hence an issue of distribution not limitation. While some countries, including the U.S., store away surplus grain production as a reserve, many human beings don't get enough to eat on a regular basis. In many developing countries, large landowners harvest export crops (such as coffee and tobacco) rather than food crops for local people. A diet rich in meat requires nearly ten times the land than that of a strict vegetarian diet. Nearly 40 percent of U.S. land is used for grazing livestock. While some of this land is more fit for free-range grazing than vegetable crops, much of it would be more productive if grains and vegetables were grown. In a study conducted by The Union of Concerned Scientists, red meat is 18 times more polluting to waterways and 20 times more wasteful of land usage than an equivalent amount (by weight) of pasta; surprisingly, poultry meats are only 11 and 2 times more polluting, respectively. Thus, hunger and malnutrition are the results of existing political economy not any real shortage of food. But can organic agriculture based on agroecology still feed the world's population without the well-known negative impacts of industrial agriculture? There is a very good case that it can. This case is being demonstrated by organic farmers around the world daily.

DENSITY GONE WILD?

So much "overpopulation" propaganda appeals to images of overcrowding (busses, markets, streets, etc.). However, population density (i.e., people per square mile) isn't correlated with abject poverty or early death (two supposed symptoms of "overpopulation"). Countries like Japan and the Netherlands are among the densest to be found, but also have some of the highest standards of living and the longest longevity. Some of the poorest countries also are very sparsely populated (such as Mali and Bolivia). Thus, high population densities do not by themselves cause abject poverty, nor do low densities guarantee health and prosperity.

WEALTH AND CONSUMPTION

Wealth differences between nations are so much larger than population differences. And because of this, affluence of the privileged (the product of the U.S. style mode of production and consumption) may be the real "terror" on the planet. Let's compare India and the U.S. as an example. India has about 4 times the population that the U.S. does. Yet, for all measures of affluence, the U.S. bests India by a much larger ratio. The U.S.'s per capita GNP (Gross National Product) is 12 times that of India's. The U.S.'s per capita energy usage is 17 times larger. And, most lopsidedly, U.S. per capita car and truck ownership is 97 times higher. So affluence would appear to be a much more influential factor (than population size) in terms of resource use and waste production. (This point is made even more striking when one considers that even the little wealth that is found in India is concentrated in the hands of the very few. Therefore, the "overpopulated" masses have even less of an impact on the planet.) Additionally, the excessive concentration of wealth in the U.S., which has 371 billionaires (Germany is second among nations with a "paltry" 55), hints at how disproportionate power and influence is distributed worldwide and how great might be their impacts as well.

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DISEASE

Is the world overpopulated because there are so many people dying every day from preventable diseases? Preventable indeed! Approximately 10,000 children die every day from preventable diseases, but the reason why isn't population size, but, rather, because basic health care (including immunizations) to the world's people are not provided. Ah, but this would be prohibitively expensive, wouldn't it? Absolutely not. Providing basic health care and education is not expensive at all. Poor countries (and states), including Cuba, China, and Kerala (India) (see writings of Amartya Sen), are able to provide their people a long lifespan comparable to the countries of the global North. The U.S. spends more than $480 billion a year on military expenditures (more than the rest of the world combined) and has already spent more than $1 trillion on the Iraq war and occupation. According to Jeffrey Sachs, we could make sure that the world's poor were "covered [with] basic needs in health, education, water, sanitation, food production, roads and other key areas" for only a cost of $160 billion annually; a mere pittance of the annual global military expenditure. One very promising approach is the Tobin tax, a small tax on global financial speculation, some $2 trillion a day; a 0.1% tax would generate $160 billion in 16 days, while helping to suppress financial instability.

POPULATION CONTROL

Driven by "logic," chauvinism, sexism, and even the desire to exploit, the massive effort to control population growth in developing countries has taken many forms. Through aggressive funding of family planning programs (FPPs), wealthy nations provide reproductive assistance to poorer ones. And while many positive outcomes come out of FPPs (such as improved access to contraceptives and reproductive education), in many instances, the mantra of "control"-ling population has meant that invasive and harmful technologies (such as Depo-Provera and copper-ringed IUDs) are/were introduced into poor women's bodies throughout the world. These efforts caused unknown suffering in the form of excessive bleeding, infertility, loss of libido, and even cancer. There are safe and culturally-sensitive ways to reduce population growth to stable rates. Interesting, most of these revolve around providing better economic and educational opportunities for women, who so empowered will use family planning technology.

MISSING FEMALES

One of the most shocking facts to come out of the population "control" efforts is the demonstrable deficit in the number of female children and female adults. It is currently estimated that nearly 100,000,000 (yes, 100 million) females are missing from the world's population. Because of a preference for sons (driven by male supremacist attitudes and practices), millions of girls are being taken out of the population stream. This "removal" is either done near or at birth (via abortion or infanticide) or while the daughter is very young (via lack of food and health care). Dowry systems in India (which direct bride's families to give their daughter a sizable monetary offering to the groom's family) and the One-Child Policy in China (which began in 1978) seem to increase the proportion of males in their populations. So, how many of the 100 million girls that are missing owe their departure to a "population-control" paradigm? We don't know, exactly. But it is very likely that a significant fraction of the missing does so result.

ENVIRONMENTAL ISSUES

Is "overpopulation" driving most global environmental problems?" Note that nearly 25% of all the CO2 emitted into the atmosphere comes from the U.S. (and the bulk of the rest of it comes from other rich countries). How can invasive species proliferation, which is decimating habitats all over the planet, be blamed on "overpopulation" when its primary cause, globalization, is being driven largely by transnational corporations in their insatiable appetite for profit at the expense of nature? Can synthetic chemicals which make our rivers, oceans and airways toxic to us and other life forms be attributed to overpopulation when nearly all of these are produced by the same transnational corporations?" Is "overpopulation" responsible for the over fishing of our planet's oceans when much of the fish caught is being consumed by affluent people far away from the point of catch? Doesn't this all suggest that something other than population size is at the root of many of the significant environmental problems we face?

LAST GASP

Despite all of this evidence (contrary to mainstream accounts), some of you are still saying, "Look, I've seen the families that have too many kids. How can a poor family, here in the U.S. or in central Africa, support 6, or even 10, kids. Doesn't this prove

that we have overpopulation?" Certainly, there are millions of families that have more children then they can support, but this doesn't make the world overpopulated. And in countries where lots of families fit this description, it itself is not a sign that the country is overpopulated. Let's consider why families are having more kids than they can support. Women (and their mates) have "too many" children for four concrete reasons:

(1) they have no access to safe and effective contraceptives; (2) the women have too few options other than being mothers (pronatalist doctrine still has a hold in many cultures and religions); (3) no social security system exists; and (4) the infant mortality rate is so high (so giving birth acts as a lottery ticket).

Thus, the reasons why some families (and communities) are having children in numbers that are unsustainable is a result of economic and cultural forces that promote such outcomes. By demanding the more equitable distribution (across and within nations and genders) of wealth, education, economic opportunities, and health care, family size will drop.

CONCLUDING OBSERVATION

In conclusion, we should look beyond the mantra of "overpopulation" as the dominant agent of human and environmental damage. If the Earth is too crowded right now, it is because we have too many billionaires. Population stabilizes with the reduction of poverty, increased access to contraceptives and immunizations, and the education and empowerment of women. Global sustainability requires solarization, demilitarization, and agroecology not "population control". The real challenge is political/economic, not population size. Another world is possible if the global "excess" population is sufficiently organized to force it into being, constraining the rule of capital that enriches the few and immiserates the many.

To find out more:

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Chair of the Environmental Studies Program at Knox College in Galesburg, Illinois, where he is raising two wonderful daughters with his wife, Huong. He is an avid Scrabble® player and enjoys finding OUGUIYA (on a rack of: AGIOYUU). He writes a monthly environmental essay for his local newspaper, *The Zephyr* (www.thezephyr.com). He spent his recent sabbatical in Chicago volunteering with an Environmental Justice organization (LVEJO; www.lvejo.org), in an attempt to understand how people are making a difference in their communities at the ground level. This five-month mental and psychological journey taught him that inspiration from good people and great work is literally around the corner (or down the street). For no reason should peace-loving people feel isolated or helpless.

DAVID SCHWARTZMAN

Born in Brooklyn, NY, 9 months after the victory of the Soviet Red Army at Stalingrad, the decisive battle of WWII, hence a "red diaper baby". Educated at Stuyvesant HS, CCNY, Brown University (PhD in geochemistry,1971). On the faculty of Howard University since 1973, active in peace movement, DC Statehood (Green) Party since early 1990s, lately specializing in tax and budget issues. Member of International Committee of Green Party of the United States. Researcher in biogeochemistry, astrobiology, environmental studies. Book: *Life, Temperature, and the Earth, the Self-Organizing Biosphere* (paperback, 2002), Columbia University Press. Two sons (Peter and Sam), two granddaughters (Camellia and Juniper), one dog (Cosmo).
Numerous papers of mine available at: redandgreen.org, Marxism & Ecology, also stuff on D.C. Statehood and Human Rights.