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Human population activity: *the* primary factor that has precipitated a climate emergency, biodiversity loss and environmental pollution on our watch.

Steven Earl Salmony, Ph.D., M.P.A.

Homo sapiens is a creature of earth, not separate from the natural world. Just as it is for other species within the web of life of earth, food is a fundamental basis of life for the human species. There are other factors that help sustain life, but food is a root cause of the growth of all species (3,4,5).

Population growth of a species can become a biological problem. In the case of *H. sapiens*, a self-reinforcing feedback loop has been established in the food-population relationship because other natural limiting factors to the unbridled growth of human population numbers have been eliminated by human ingenuity (e.g., sanitation, medical technology). Humans are an exceptional species in many ways, but not in terms of population dynamics (3,4,8). Hence the recent explosion of absolute global human population numbers that are primarily caused by spectacular annual increases in the human food supply is derived from enhanced food production and distribution capabilities. Other species cannot produce food beyond that provided by the natural world.

The conundrum: increasing food production and distribution capabilities continuously, specifically for the purpose of meeting the needs of a growing human population, has also fueled a population explosion. With each passing year, more people are being fed, yet more people are going hungry.

Regardless of what we believe because it is politically convenient, economically expedient, socially correct, religiously tolerated and/or culturally syntonic to do so, we are currently confronted with an undeniable biological problem that is explained in uncontested ecological science of human population dynamics. A new biological understanding is emerging from ongoing research that replaces a biologically implausible, ideologically driven, logical contrivance. Stated simply: as is the case with other species, food is the independent, not the dependent, variable in the relationship between food and population numbers (3,4,7).

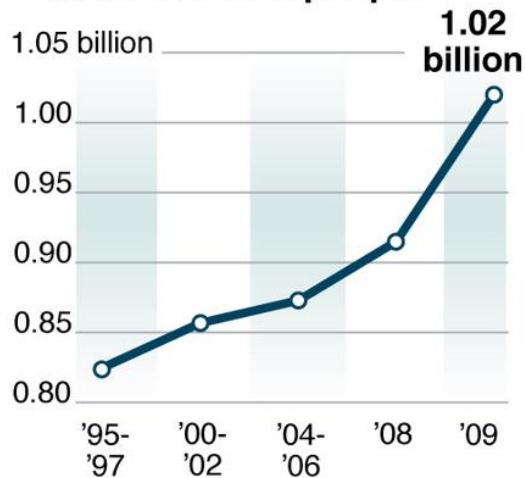
It is food availability that drives population increases and it is that population growth which fuels the false perception, the misleading impression, the fatally flawed conception that food production needs to be increased to meet the needs

of a growing population. Year after year, while food production is increased, leading to global human population number increases, hundreds of millions in the human family continue to go hungry. Why are those people not getting fed? And why is it that future generations may never be fed? We are increasing the number of hungry people as we feed more people. World hunger grows annually despite abundant total food harvests. Starvation has not been remedied by boosting food production. Increasing food production to eliminate malnourishment, hunger, and starvation has not been a solution. See graph, World News, 1 billion worldwide are hungry, U.N. Food and Agriculture Organization says; prices blamed in part. Updated January 12, 2019. Posted October 15, 2009.

Global hunger on the rise

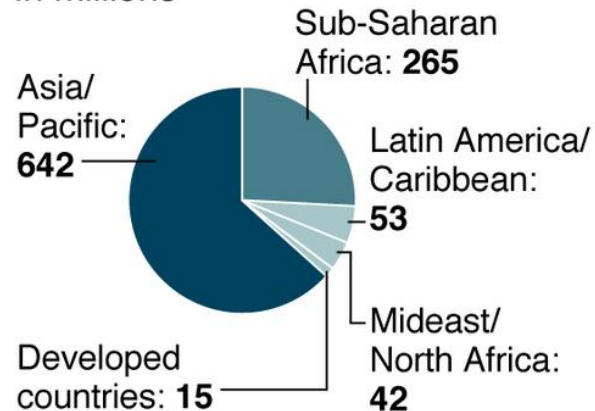
The number of undernourished people in the world surpassed 1 billion, according to a U.N. report released Wednesday.

Undernourished people



Regional breakdown

In millions



SOURCE: Food and Agriculture Organization of the United Nations

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What is becoming evident is that the overproduction, overconsumption, and overpopulation activities of the human species are occurring synergistically and simultaneously threatening life as we know it. The spectacular increases of these distinctly human overgrowth/overshoot activities are causing the mass extirpation of earth's biodiversity, the relentless dissipation of its limited resources, and the unbridled degradation of its environs which, when taken

together, present a clear and immediate threat to a healthy future for children everywhere and coming generations.

The enormous, unbridled increase in the overall magnitude of the human population in our time on a planet with the size, composition, and ecology of earth has precipitated a growing number of deleterious circumstances, including environmental pollution, biodiversity loss, ecological disruption, and climate destabilization. Global human activity is threatening the future of life as we know it and the planet as a fit place for human habitation (1,6).

After thousands of years of stable human population numbers, the past 225 years have seen total population increase in size from 1 to 8 billion. How are humans going to limit sensibly and effectively the current unbridled growth of their population numbers without beginning to limit “increases only” in the total production of food for human consumption? Alternatives to this step (e.g., educational/economic opportunities for females, contraception for males/females, and voluntary sterilization) represent necessary goals to be achieved, that is certain. But these and other helpful interventions, by themselves, will prove insufficient to stabilize human population numbers because human beings will continue to live or die primarily as a function of food supply (1,3,4,5,7).

The science of human population dynamics makes one thing clear. The United Nations mantra “food production must be increased annually to meet the needs of a growing population” is a widely shared and consensually validated mistake of colossal proportions (2,3,7). This mantra is not an expression derived from language of science. By recognizing how the mistake is generated out of the realm of the preternatural, we can replace it with a more accurate understanding of a condition of being human (i.e., population dynamics of *H. sapiens*) and a more fulsome appreciation of the way the world we inhabit works, with humans now visibly disclosed as an integral part of the web of life.

If ever the human community is sensibly and meaningfully able to restrain the recent bacteria-like growth of human population numbers, limiting increases in total food production for human consumption will need to be a part of any program of action. If food harvests that sustain the lives of eight billion people are simultaneously and more fairly redistributed so that the human family is provided sustenance along with universal, free, safe, accessible, voluntary

contraception/sterilization, such steps in a comprehensive program of action might well lead toward population stabilization and the reduction of human suffering associated with the insufficient availability of food.

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