

Who Won the Bet of the Century?⁹

The Population Bomb, written by Paul and Anne Ehrlich in 1968, is the classic work promoting the idea that the Earth is overpopulated and that overpopulation will lead to humankind's demise. The Ehrlichs were alarmists; the front cover stated, "Population Control or Race to Oblivion?" and "While you are reading these words four people will have died from starvation. Most of them children."

In 1980, Paul Ehrlich and Julian Simon, then an environmental economist and Professor of Business Administration at the University of Maryland, made a famous wager about the prices of commodity metals over the next ten years. In 1990, Simon won the Simon-Ehrlich wager, as he correctly predicted that the prices of the five selected metals would decrease, instead of increase, which was Ehrlich's prediction. Ehrlich had argued that overpopulation was leading to depletion of the Earth's resources, and Simon countered that human ingenuity would create substitutes as necessary. The result of the wager was an indication that resources are not as scarce as Ehrlich had claimed, given that the population increased by 800 million while the amount of metals on the planet did not increase. A New York Times article explains the reason Simon won:

"Prices fell for the same Cornucopian reasons they had fallen in previous decades – entrepreneurship and continuing technological improvements. Prospectors found new lodes [...]. Thanks to computers, new machines and new chemical processes, there were more efficient ways to extract and refine the ores for chrome and the other metals. For many uses, the metals were replaced by cheaper materials [...]."¹⁰

Julian Simon explained that humans are able to discover "new deposits, new ways of extracting the resource, and new substitutes for the resource." He continued, "And the more people there are, the more minds that are working to discover new sources and increase productivity, with raw materials as with all other goods."¹¹

This anecdote about the Simon-Ehrlich wager demonstrates that humanity's creativity is the Earth's greatest resource. This requires optimism about people and their ability to contribute to the good of society, instead of an alarmist or fear-mongering view that a growing population can only result in increased poverty or the depletion of natural resources.

9 World Youth Alliance White Paper on Sustainable Development, available at https://www.wya.net/wp-content/uploads/2014/04/Sustainable_Development_White_Paper.pdf (last visited Nov 22, 2022).

10 Betting on the Planet by John Tierney, *The New York Times*, Dec. 2, 1990, available at <https://www.nytimes.com/1990/12/02/magazine/betting-on-the-planet-505690.html> (last visited Nov 28, 2022).

11 The Ultimate Resource 2 by Julian Lincoln Simon.

Julian Simon found that “[t]he most important economic effect of population size and growth is the contribution of additional people to our stock of useful knowledge. And this contribution is great enough in the long run to overcome all the costs of population growth.”¹² This basic theory—that humans are creators and problem-solvers and respond to challenges with their creativity, rather than continuing to “destroy” – highlights the incredible value of humanity. This human creativity can provide limitless opportunities to eliminate poverty and poverty-induced problems.

Human creativity is evident in many areas, and the pattern is the same: as population increases, at times, there are short-term negative effects as existing resources are overtaxed. Then, human ingenuity steps up and presents new solutions. For example, in the area of food supply, a growing population drives up prices in the short run because of increased scarcity, but these higher prices attract potential entrepreneurs who create new solutions, which then cause prices to decrease. The supply of food then increases, despite the claims of many, who, like Ehrlich, argue that “the world is rapidly running out of food.” The creativity which solved the food crisis came from improvements in agricultural knowledge due to research and increased infrastructure as well as better transportation networks, which delivered food more efficiently. An increase in population also corresponds to an increase in agricultural output because of an increase in farmed land. The increase in the amount of farmland is the natural response to the need for more food as the population grows. Stories of population growth leading to a subsequent agricultural boom abound. This pattern has occurred in Ireland, China, and Burma. The amount of available arable land is ever increasing because people can improve poor land and reclaim wasteland for useful purposes. This increases productivity of food per unit of land, which yields more crops, and results in less additional land needed for farming.

Furthermore, when the population or the income level of a country grows, demand increases for the invention and development of capital goods such as machinery, tools, and factories. While demand increases due to a larger population, supply does as well, because there are more potential inventors and developers of the needed capital goods. Since people need tools to create other goods, the introduction of capital goods facilitates the creation and provision of goods and services to the population.

Obviously, economic growth needs to be sustainable and take into account the environmental and social aspects of growth. Increase in efficiency of production should and often is accompanied by the improvement of the production process in terms of it having a less negative impact on the environment. Human ingenuity is capable of both producing economic growth and doing it in an environmentally friendly and socially responsible way.

¹² *ibid.*