

Malthus and Overpopulation: Miscalculated Future of Earth

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Economics may seem all about calculations and money, however, forecasting the global economic climate and using those calculations to foresee the possible crises form the majority of economics. The methods and models are used in this process, and to develop these methods and models, data from the past economic activities are used. By using the exact process, Thomas Malthus created the Malthusian Growth Model in 1798, the reason why this model is still argued over is it claims that industrial advancements will cause the earth to overpopulate. In hindsight, we know that was false, we wanted to look into why he thought that, how he came to that conclusion, and why that model has failed. [\(1\)](#)

Industrial Revolution was already 30-years in the making while Malthusian Theory was presented, Malthus was concerned about overpopulation because he thought the speed of reproduction would beat the industrial advancements, hence creating the overly populated earth. To look deeper into the model, the data he used showed how the living conditions of the people did not improve in the last three centuries, even though there were industrial advancements (not even close to the advancements the Industrial Revolution provided, of course). Interpreting that data gave him the conclusion of more technological advances will only increase the population, and the increased output levels will cause people to consume more, hence making the standard of living unchanged in the long run. One of the reasons why he formed this model this way is that he considered the output as something only produced from land with labor, in the long run, overpopulation and underproduction might be a problem since the land is limited. When people reproduce more and consume more, the living condition would stay the same as it did for the last 3 centuries; unless the technology is so advanced that it improves the condition of living, in that case, Malthus Growth Model becomes obsolete. [\(2\)](#)

There was only one thing he was right about, the Industrial Revolution caused a steep increase in population. The biggest population boom of human history happened after the Industrial Revolution, in the short run, Malthus was right about the population growth. Even though he did interpret the data he has accurately for the pre-19th century, he did not calculate how fast the technologies would improve and how the technological advancements affect the fertility rates. With urbanization, an increase in the women's participation in the workforce, and advanced contraceptive methods, the speed of the fertility rates dropped in the second wave of the Industrial Revolution (late 19th-early 20th century). Additionally, the living conditions of the people kept improving with the advanced technology, hence making the long-run projections of Malthus further wrong. The concern of technology failing to meet the nutritional needs of the population would be proven unnecessary in the long run, however, that does not mean there is no hunger problem on earth. [\(3\)](#)

The core reason for today's world hunger is unfair distribution. Unfairly distributed wealth, income, and food create this problem because the world has the resources to feed everyone living on it. More the rich hoards resources, the poorer the rest of the world gets. Even though the average of living conditions is at all-time best, there are still people who do not have access

to basic needs such as food and shelter. Ignoring the awful conditions the not-so-small part of the world is living in will not bring us the solution to world hunger, redistribution of resources will. To answer the questions that may arise, with today's speed of advancements of technology and the continuously decreasing fertility rates, "overpopulation" would not be realistic to expect happening. While there is no plan to stop technological improvements, the world's population is estimated to be 10.9 billion with close to zero fertility rates in 2100. (4) However, if left untreated, the unfair distribution of the resources may get worse, hence making feeding everyone harder. While the industry "trap" of Malthus was unrealistic, even though the reasons are very different than his predictions, being unable to meet all the nutritional needs is very realistic in 2020.