

**Malthusian Theory** is a theory of population growth and its consequences, first articulated by British political economist and clergyman - Thomas Malthus in 1798. Malthus is generally credited with being the first scholar to undertake a scientific examination of the dynamics of population growth.

Trained as a clergyman, Malthus eventually took an academic position, after the publication of his groundbreaking work, *Essay on the Principle of Population*. Malthus's work set in motion a vigorous debate over how and why human populations increase, and what the consequences of such increases may be. Malthus holds that human populations inevitably exceed the carrying capacity of the land they occupy. The debate Malthus initiated has continued, to one degree or another, for the past two centuries and his theory has been both reviled and revived by a host of social commentators.

Malthus argued that the rate of growth for the human population would invariably outpace the ability to produce food. This is due primarily to the sexual drive of humans, leading to high rates of procreation, and to the subsequent principle, according to Malthus, that a population will increase at a geometric rate of growth, while the ability to increase the food supply can only grow at an arithmetic rate. That is, while population will increase by ever-greater margins, agricultural production can only be enlarged at a steady rate. Thus, at certain points in the history of a population, represented by the early stages of the cycle, the rate of food production is equivalent to the rate of population increase, and there is enough food to feed everyone. Over time, however, the two rates diverge, and the gap between the increase in the food supply and the increase in population widens, resulting in ever-increasing food shortages. At some point, this results in wide-spread famine and a large-scale loss of population due to starvation. This event is often referred to as a Malthusian catastrophe, an episode which then triggers a return to equilibrium and the beginning of a new cycle. The food supply available after the catastrophe is sufficient for the reduced population, but the instinct to reproduce will soon result in a population growth rate that will exceed the ability to feed that population, assuming other factors do not intervene.

Malthus labeled events that slowed or interfered with what he described as "positive checks." These factors included war and disease, which obviously reduced the population, as well as more general limiting factors like poverty, hazardous working conditions, and infanticide. He did not advocate contraception in general, although he recognized that the practice would also serve as a "check" to some degree on population growth. Malthus propounded that the population would eventually reach a level of growth that would exceed the ability of the land to feed everyone, without the frequent effect of the "positive checks."

Malthus, writing before the mechanization of agriculture and accompanying advancements in food production brought about by the Industrial Revolution, failed to anticipate the massive increases in farm output that would result from technological innovation. In spite of the persistent criticism of Malthusian theory in the 19th and early 20th centuries, in the 1960s the theory was revived in the form of neo-Malthusianism. This school of theorists suggested that while the evidence of the cyclical principle that Malthus had articulated in the early 1800s had not materialized, in fact Malthus was accurate in his approach and had only erred in his timing: the Industrial Revolution had only postponed the cycle, and humanity was once again approaching the point where population growth would outstrip food production. The benchmark work of the neo-Malthusians was Ehrlich's 1968 book *The Population Bomb*, which had an immediate effect on social policy and legislation, especially in the United States. Ehrlich predicted massive food shortages that would result in the deaths of "hundreds of millions" of people in the ensuing decades. Many of these deaths would not be confined to the developing world, but would occur in North America and Europe as well. He forecast a dramatic decline in life expectancy in the United States, as well as an overall drop in the total American population. Other catastrophic predictions were a severe water crisis in the western United States and pervasive shortages of certain resources, particularly metallic ores.

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