Thomas Malthus: Theory of population  
Thomas Robert Malthus was a British economist and a demographer, whose famous Theory of Population highlighted the potential dangers of overpopulation. Malthus put forth his ideas in six editions of his famous treatise 'An Essay on the Principle of Population'. His thinking took shape under the influence of the optimistic ideas of his father and his friends especially Rousseau, for future improvement of the society. In the first edition of his treatise, Malthus put forth his views that opposed the belief of scholars like Marquis de Condorcet and William Godwin who were optimistic about population growth in England. During the Industrial Revolution, England experienced a steep increase in its population. In his book "The Enquirer", William Godwin promoted population growth as a means for human beings to attain equality. According to him, an increased population would create more wealth that would provide food for the whole humanity. Scholars of such school of thought believed that, both man and society could be made perfect. In contrast to this viewpoint, Malthus interpreted overpopulation as an evil that would reduce the amount of food available per person.  
  
The Theory  
  
In his famous treatise 'An Essay on the Principles of Population', Malthus stated that, the populations of the world would increase in geometric proportions while the food resources available for them would increase only in arithmetic proportions.  
  
In simple words, if human population was allowed to increase in an uncontrolled way, then the number of people would increase at a faster rate than the food supply. A point would come when human population would reach the limit up to which food sources could support it. Any further increase would lead to population crash caused by natural phenomena like famine or disease.  
  
According to him, human society could never be perfected. He believed that man is a lazy animal, who would lead a satisfied life and procreate as long as his family was well fed. However, as soon as human population would feel constraints in food supply due to increase in population, he would again work hard to provide enough for his family. This might lead to an increase in agricultural production to provide for all, but at the same time man would be back to his complacent stage, where all his needs would be fulfilled. This would start the cycle of overpopulation and food shortage, all over again. Having been a clergy, Malthus validated his theory on moral grounds that suffering was a way of making human beings realize the virtues of hard work and moral behavior. Such kind of suffering due to overpopulation and limited food supply was inevitable.  
  
Assumptions  
  
Malthus took into account two main assumptions:  
  
Food is an essential component for human existence.  
Humans have the basic urge to multiply.  
  
Explanation  
Malthus' theory was based on the assumption that the power of population to multiply is much greater than the power of the earth to provide subsistence for man. In his own words "passion between the sexes is an inevitable phenomenon", hence, when unchecked, population would grow at such a high rate that it would outstrip food supply. According to him, disease, food shortage and death due to starvation, were nature's way to control population. He proposed that human beings adopt measures like infanticide, abortion, delay in marriage and strict following of celibacy to check population growth.  
  
Relation Between Population, Wages and Inflation  
  
Malthus described the whole scenario as a "vicious cycle" of population growth and its effects. He proposed that the boom in population will result into excess of labor force ready to work at the available wage rate, giving them the income to buy food for their family. This will lead to an increase in the overall demand for food outstripping its supply. Hence, the prices will rise and inflation will set in. This inflationary pressure will worsen the situation of the already distressed poor section of the society leaving the riches unaffected. The poor will work more to improve their situation and will also consider reducing the population growth so that they have less mouths to feed. However, this will only last till the population equals the food supply and the inflation ceases; after which, overall standard of living will rise and so will the population explosion reaching the same point, hence called the vicious cycle.  
  
Proposed Solutions  
  
In his first edition of the essay, Malthus proposed two main solutions to the problem of population explosion, namely:  
  
Positive Check  
This method results in increase in death rate. He described this as God's way of restoring the Natural Order. It includes famines, hunger, epidemics, war and other natural miseries which cause large-scale deaths. Although it helps in controlling the population growth, it brings with it widespread misery and pain. Hence, it is not regarded as an ideal solution to population problem.  
  
Preventive or Negative Check  
This method refers to human effort in reducing the birth rate. It is more practically and logically applicable. Abortion, prostitution, postponement of marriage, birth control and celibacy are few measures that were advised to be strictly followed in order to help solve the problem.  
  
In his second edition of the same essay, Malthus laid more emphasis on:  
  
Moral Restraint  
This is regarded as a universally applicable solution keeping up with the ideologies of virtue, economic gain and social improvement. According to this principle, one should refrain from marriage till the time he is capable of supporting a family with food, clothing and shelter. Until then he should follow strict celibacy. In the words of Geoffrey Gilbert, "He (Malthus) went so far as to claim that moral restraint on a wide scale was the best means indeed, the only means of easing the poverty of the lower classes."  
  
Impact  
  
Malthus' theory had great influence on both Charles Darwin and Alfred Wallace, who are the co-founders of the modern evolutionary theory. In his own words Darwin acknowledged, that he was already aware of the 'struggle for existence' among different species of plants and animals. However, it was only after he read Malthus' work, he realized that animals in their struggle to survive retained the favorable features that would help them adjust to the environment, and lost those that were of no use to them. Thus, the Theory of Natural Selection was born.  
  
By the end of the 19th Century, when living standards improved and birth rates dropped in the Western countries, concerns of overpopulation became irrelevant. However, in underdeveloped countries which have agrarian economies, Malthus' theory often finds credibility.  
  
Criticism  
  
Some critics like Karl Marx, argued that Malthus failed to recognize the potential of human population to increase food supply. He is accused by many to have failed to comprehend man's ability to use science and technology to increase food supply to meet the needs of an increasing population.  
  
Thinkers from the field of social sciences have criticized Malthus for his belief that the human society could never be made perfect. He opposed all political, social and economic reforms that did not aim at controlling birth rate. His own methods of checking population growth were criticized for being impractical. Malthus was opposed to the Poor Laws popular in England, which provided relief to the people who qualified as poor under the laws. According to him, such charity would provide only short-term relief to them and let the poor remain in their state of financial distress. This thought of Malthus was viewed as misanthropic.  
  
From his writings, some have interpreted Malthus as a rigid and pessimistic individual. However, he is also viewed by some as a pragmatic thinker, who put a check on the unbridled enthusiasm of some who viewed increase in population as a means of progress