

# The increase of food price economics essay

[Economics](#)



Definition of demand is the ability and desire to buy a particular quantity of goods or services in a given time period at a specific price, ceteris paribus. The law of demand states that when the price of a product is higher, the quantity demanded of the product is lower and when the price of a product is lower, the quantity demanded of the product is higher, ceteris paribus. The definition of supply is the ability and desire to sell or manufacture a specific product or service in a given time period at a specific price, ceteris paribus. The law of supply states that when the price of a product is higher, the quantity supplied of the product is greater and when the price of a product is lower, the quantity supplied of the product is lower, ceteris paribus. A group of buyers and sellers of particular good or service is called a market. The forces that cause market economies to work are supply and demand. Based on the same principle, the food price is determined by market through the interaction of demand and supply. Any changes in supply or demand will cause the market price to change. The trend of price in global food market in mid 2012 has shown an increase. Overall, the price in global food market rose by 6% in July. There are few factors that cause the food price rises. One of the factors is the high demand in global food. The high demand of food occurred because of the population growth and diet changes. Food demand grows at a faster rate than population growth and higher-income diet has moved away people from a diet which consists of a large quantity of staple food crops into a diet in high protein. (Card. iastate. edu, 2008)Diagram 1. 0http://tknomics-com. webs. com/beanie. gifDemand curveFrom Diagram 1. 0, we assume that the demand for food is the red curves while the supply for food is the blue curve. When the population increases and when more health conscious people change their diets from q1 to q2, the food demand curve <https://assignbuster.com/the-increase-of-food-price-economics-essay/>

shifts rightward from D1 to D2 and therefore the food price increases from  $p_1$  to  $p_2$ . By the increasing of demand, the supply quantity increases but the supply curve does not shift.

### 1.1 The high demand of food

#### 1.1.1 Population growth

The rise of food demand is driven by the increasing demand consumption in rapidly developing countries such as Thailand and Malaysia. The population of developing nations is increasing in a fast rate and their diets shift to large quantity of dairy products. There is an expectation of a moderate increase in consumption of dairy products in developed nations with the exception of fresh dairy products and cheese while there is an expectation of an increase in consumption of all products at 30% in 2021 in developing nations. Developing nations are estimated to overtake developed nations in the production of milk in 2013 by high increases as the developing nations have greater potential to provide the land for agriculture purpose. By this, an indirect demand of coarse grains and oilseeds for feed of livestock will be driven.

#### 1.1.2 Rising consumption of meat

There is an obvious change of Asian diets to the larger quantity of meat by the rising incomes and urbanization. Therefore, the consumption of meat will rise at a fast rate. The increase of demand for meat will lead to the surge of consumption in grains by cattle. This is because 1kg of beef requires 8kg of cereals to be produced. Nowadays, the farmers use 2.00 to 2.50 million more tons of grain to feed the cattle than the amount they used 20 years ago. By this, the price of grains such as wheat and corn will rise as their demands increase.

#### 1.1.3 Bio-fuel production

In United States and Europe, the policies to increase the production of ethanol and bio-diesel are adapted to retard global warming. There are about 15 million tons of American corn was processed into ethanol in 2000. Besides, the amount reached around 85 million tons in 2007. The

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higher price of oil is the main factor behind the higher commodity price of agricultural projections, not only influencing oil-related production costs but also raising the demands of bio-fuels and the feedstock of agricultural in the production. Moreover, the demand of food and ethanol for sugar crops will maintain the high sugar prices by sustaining over the medium term.

However, governments have given subsidies to farmers to promote the rise of production in many countries nowadays. 1. 2 The decrease of food supply One of the subsidies is the incentive for farmers to increase the production of crops which can be processed into bio-fuel. This subsidiary has avoided the land from production for food. [http://img. sparknotes.](http://img.sparknotes.com/figures/5/5259b727009a2736d6ad639bab3494ff/shiftgas.gif)

com/figures/5/5259b727009a2736d6ad639bab3494ff/shiftgas. gif Diagram 1.

1 Supply curve According to diagram 1. 1 above, the supply of food is shown by the blue supply curve. When more farmers receive the incentives to plant more crops for bio-fuel, the quantity of food supply decreases and shifts leftward from  $S_1$  to  $S_2$ , therefore the food price will increase from  $p_1$  to  $p_2$ .

By the decreasing of food supply, the quantity of food demand decreases but the demand curve does not shift. 1. 2. 1 The factors affect the food

supply One of the factors which decreases the food supply is drought. Since America's worst drought will increase the inflation rate, a difficult obstacle is produced into global economy. The drought has destroyed the corn and soya bean crop at 45% and 35% respectively as the worst harvest from 1988.

Moreover, the climates also affect the supply of food. In Britain, its early summer will increase the basic staple food costs. Besides natural disasters and seasonal factors, the increases of price of input and cost of production such as fertilizer, fuel for transportation and delivery cost. 1. 3 How are the

prices to have been affected? 1. 3. 1 The activities of speculators in the <https://assignbuster.com/the-increase-of-food-price-economics-essay/>

commodity markets. The expectation of future supply decreases due to poor harvest such as in Russia and Ukraine. Many countries keep for their own countries rather than sell to outside as the future supply will decline.

Furthermore, the decrease of future supply will also cause the food price to rise. The sellers will try to hide the food and sell it when the food is at a high price. The speculators reckon that the decline of future supply will give opportunities to exploit the rising food prices. Through this global crisis, the speculators increase the food prices and cause hunger crisis all around the world. There is also an estimation that fertilizer companies are profitable as there will be "second green revolution" to enhance yields by more fertilizer usage. The price of fertilizer will be increased and the cost of production will also be increased. By this reason, the food is driven to a high price indirectly.

1. 3. 2 The release of stock. The decrease of releases of stock will lead to decrease of food supply, so contributes to the rising of food price. One of the main factors that causes the release of stock low is low production as the topic discussed in 1. 2. The second factor is export barrier. For example, the grain export will be slow down in winter months because the seasonal weather will cause a logistical problem at the ports in Russia. Besides, the lowest wheat crop will be harvested because of drought. The third factor that affects the low of release stock is import tariff. When the import tariff increases, the cost of input will be increased too. Then the price of food imported will also increase. For example, Malaysia charges a high import tariff to rice. When rice is imported from Thailand, the prices will become very high. Nature of demand for wheat and similar products.

2. 1 Elasticity of demand. The demand for food is inelastic as an increase of price will cause an increase of total revenue and a decrease of price will cause a decrease of

total revenue. Elasticity measures the relevance between a product and the price based on the consumer's demand, income and supply available. The demand elasticity is a measure of how the price changes affect the quantity of demand. The elasticity can be calculated by midpoint method and traditional method. The traditional method can be calculated by the formula, Price elasticity of demand =  $\frac{\text{Percentage change in quantity}}{\text{Percentage change in price}}$ . The midpoint method can be calculated by the formula, Price elasticity of demand =  $\frac{\frac{Q_2 - Q_1}{(Q_2 + Q_1)/2}}{\frac{P_2 - P_1}{(P_2 + P_1)/2}}$ . If the percentage change in quantity is bigger than the percentage change in price and elasticity is smaller than 1 then the price elasticity of demand is considered as inelastic.

2. 2 Demand elasticity of food Food has an inelastic demand. For example, wheat and similar products, they do not have many substitutes, so consumers cannot change their choice easily if the price increases. Besides, wheat and similar products are perishable. People will always renew them and their market will always exist. Moreover, wheat and similar products are necessity in human life. Consumers cannot survive without them in their diets. Therefore, even there is a high increase in price of wheat, consumers still will buy it always. As food is inelastic, the increase in price will cause the percentage change in price bigger than the percentage in quantity demand. So, the farmers will gain high income from the rising prices of food. [http://sehlhorst.smugmug.com/photos/552108937\\_e5ZpV-L.png](http://sehlhorst.smugmug.com/photos/552108937_e5ZpV-L.png)

Diagram 1. 2 Inelastic demand Wheat and its similar products have inelastic demand. When the quantity of them decreases from  $Q_1$  to  $Q_0$ , their prices will increase from  $P_1$  to  $P_0$ . The curve is relatively steep as the consumers' price sensitivity is relatively low.

Factors which determine food prices in the long run

3. 1 The impact of the increase in global food price in long run The fast rate of increase in food prices raises poverty and hunger crisis in many parts of world. The <https://assignbuster.com/the-increase-of-food-price-economics-essay/>

agricultural production cannot afford the rising consumption of food. Since the demand of food increases at a rapid rate, the prices of staple food increase rapidly. Many investors target this profitable opportunity to get benefits. They results a non-stop increase in the global food price. 3. 2 The ways to increase production However, we can make an effort for this crisis. We can change the plant capacity in long run such as change a farm to a yard. The investors should make investments in the expansion of food supply to cover the demand of global food such as fertilizers, drought-resistant seed, and irrigation equipment. If the global food supply increases, the global food prices will decrease. ImageDiagram 1. 3Supply curve According to diagram 1. 3 above, when the quantity of food supply increases the supply curve shifts rightward from  $S$  to  $S_1$ , then the food price will decrease from  $P_1$  to  $P_2$ . By the increasing of food supply, the quantity of food demand decreases but the demand curve does not shift. We can increase the productivity of agricultural products in many ways. We must sustain the use of land, water, marine ecosystems, forests and recycle products. Besides, we also should resolve water scarcity problems which happen in many developing nations and retard the climate changes such as global warming which will affect the production of agricultural crops to protect the environment. In achieving the deceleration of global warming, poultry meat can be consumed instead of pig meat and beef meat or change into vegetarian to prevent the release of carbon dioxide which will accelerate global warming. The developing countries which have more production can do international trade with other countries to overcome the lack of food supply. Moreover, governments should encourage more agronomic practices, regulatory environment, research and development in agriculture.

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ConclusionAs a conclusion, from the perspective of economy, we should make some efforts to increase the supply of global food to cover the rising demand of food. The global food prices and the agricultural market can be controlled based on the basic economic concepts.