Pests

Pests are destructive insects or other animals that attack crops. Depending on the crop and the severity of the infestation they can cause minor damage or destroy a crop completely.

There are several methods of controlling pests. One method is to spray the plant with a chemical called an "insecticide" to kill the pests. There are also many other methods that do not use chemicals such as beneficial insects, and integrated pest management (IPM).

Supply and Demand Challenges for Farmers

Weeds

Weeds are unwanted plants that grow in competition to a cultivated plant. Weeds growing in a field take the water and soil nutrients that the crop needs for healthy growth. They also diminish the quality of the harvest.

There are several methods of controlling weeds. One method is to spray a chemical called a "herbicide" to kill the unwanted plants. Other organic forms of weed control also exist such as cover crops and using various cultivation practices to minimize weeds.

Disease

Just like people and animals, plants can get diseases which lead to abnormal growth or death of the plant. Plant diseases can be caused by fungi, bacteria, or viruses.

Some diseases can be killed or controlled through chemicals such as a fungicide. Non-chemical control methods also exist. In either case, some diseases are very difficult to control and lead to a partial or complete crop loss.

Supply and Demand Challenges for Farmers

Drought

Water is a natural resource that is crucial to the healthy growth of a plant. Seasons of drought can significantly decrease a crop harvest.

Some plants inherently require more water for growth than other plants. Methods of selective breeding can be used to create varieties of plants with deeper root systems and characteristics that allow them to grow with less water.

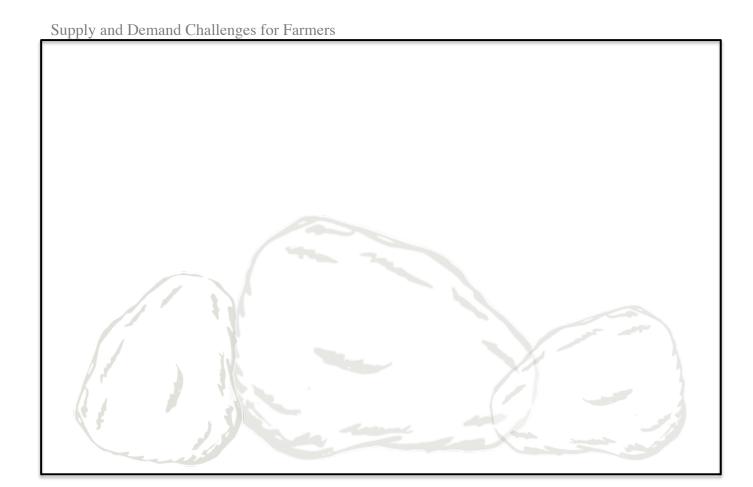
Provide What Consumers Want

Farmers must produce a crop to meet the demand of consumers. To do this, the crop must be:

1. Safe

2. Affordable

3. Available (enough supply to meet demand)



Damage in Shipping

Many of the plant-based foods we eat must be grown in a specific climate or region and then be shipped to local grocery stores to be purchased. If the product is damaged in shipping consumers are not likely to purchase it.

Supply and Demand Challenges for Consumers

Spoilage

All food will begin to spoil after a given amount of time, often referred to as a "shelf life." Some food lasts longer than others. Consumers are not likely to purchase food that has or will begin spoiling before they can use it.

Convenience

As a whole, many consumers choose to purchase food that is quick and easy to prepare. For example they may want fruit and vegetables that can be cut up ahead of time without browning or discoloration.

Supply and Demand Challenges for Consumers

Cost

Customers prefer to purchase food that is priced low or fair.

There are many factors influencing the cost of our food. The business laws of supply and demand apply. Crop failures due to disease, pests, drought or other disasters decrease food supply and therefore increase the cost of food.

Flavor

Taste, flavor, and texture are important to consumers. Each of these factors are influenced by factors such as the plant variety, ripeness, and growing technique.

