

Economic Importance of Crops

Lesson I: Economic Importance of Crops

The strength and independence of the U.S. is in part the result of the efforts and accomplishments of the American farmer. Efficient production in the U.S. enables people to work in other occupations while a small proportion of workers devote their efforts to producing food. The production of food has been and will continue to be of primary importance. Agriculture in the U.S. and the world will continue to be a key point of concern when nations discuss economics and world trade.

Major Crops of Missouri

The diverse geography of Missouri provides a wide range of opportunities for agricultural use. The land, soil type, climate, and available water promote the diversity of agriculture throughout the state. Because of the uniqueness of Missouri land and natural resources, the state is able to produce a variety of crops. Major crops produced in Missouri are soybeans, corn, wheat, cotton, rice, hay, grain sorghum, fescue seed, and lespedeza.

Missouri and the Nation

The production of agricultural products plays a key role in the economy of the state of Missouri. Each year, Missouri agriculture generates over \$15 billion in marketing. Because of the state's agricultural diversity, Missouri is able to export many agricultural products to other countries.

Many other states in the U.S. also produce crops for export overseas. However, according to the Missouri Field Office of the USDA's National Agricultural Statistics Service, Missouri ranks among the top 10 states in the production of several crops:

- 2nd in hay production (excluding alfalfa)
- 4th in hay production (all)
- 4th in rice
- 5th in grain sorghum
- 7th in soybeans
- 8th in corn for grain
- 9th in cotton
- 9th in cottonseed
- 9th in winter wheat

- 10th in tobacco
- 10th in watermelon

Major World Crops

The U.S. is the top producer and exporter of agricultural products in the world. Other countries have increased crop production levels so they can provide more food and participate in world trade. Major crops are grouped by their use: cereal grains, oilseeds, sugar, and fiber crops. The major crops in these categories are listed below:

1. Cereal grains – wheat, barley, oats, rye, corn, sorghum, rice
2. Oilseeds – cotton, soybeans, peanuts, canola, rapeseed, sunflower, safflower
3. Sugar – sugar beets, sugar cane
4. Fiber crops – cotton, hemp, flax, jute

Which Crops to Grow

Many factors that affect plant growth should be considered when deciding what crops to grow. The U.S. has abundant fertile land (land that is fit for cultivation) and a relatively mild climate. However, there are many factors that affect which crops are grown: land capability and use, climate, resource availability, product demand, and international trade.

Land capability and use refers to what the land is capable of producing within its limitations. Not all land is the same. Many characteristics are different, and when considering land for agricultural use, recognizing limitations is important. Land capability also refers to the most appropriate use of land. Some land, because of its slope or soil type, should be restricted from row crop production. Other land may be less subject to erosion and therefore, may be used for row crop production.

Climate is another factor that must be considered when deciding on which crop to grow. All aspects of climate affect agricultural production and development. Surface and subsoil temperatures are critical to plant and microorganism growth. Some crop plant varieties are adapted to cooler temperatures and shorter growing seasons. However, most crop plants will grow best in an optimum temperature range.

Crop Science

Climate is one factor that limits which crops can be grown. In Missouri, for example, the below-freezing temperatures prevent citrus fruit from being grown.

Resource availability should also be considered in production decisions because of the related production expenses. Successful crop production relies on the availability of various resources and their efficient use. Crop production is unprofitable when the cost of providing water, fertilizer, or transportation to storage or market is too great.

Product demand affects the level of crop production in the U.S. and internationally. Crop production decisions should consider the product demand by industry and consumers. If the demand for the product is low, production may be unwise unless the producer has plans to use the product on the farm (e.g., feed for livestock, production of ethanol). Crop production should focus on high-demand crops. However, one exception would be canola. Canola is grown for its high quality vegetable oil. Corn and soybeans are the most common crops that produce vegetable oil. However, canola is grown because its vegetable oil is lower in saturated fats. Demand for canola has been limited. However, as consumers become more aware of healthful eating, demand is expected to increase.

International trade affects the kind and amount of crops grown. The U.S. is no different than any other nation. When a specific resource is needed by the U.S., trade is negotiated for that resource. For example, the U.S. produces far less minerals than it uses. Many minerals are imported from developing countries. Often these countries do not have the capability to produce enough food. Therefore, they trade their surplus mineral resources for U.S. food crops (e.g., wheat, soybeans, and corn).

International Relationships

Crop production is more complex than simply providing food or fiber to consumers. U.S. crop production has an impact on relationships with other countries. One positive impact is that the production and exportation of crops help to stimulate the U.S. economy. Jobs in export industries are provided by producing, processing, and marketing crops. Another advantage of U.S. crop production is the contribution to the country's trade balance. Agriculture

exports more agricultural products than it imports. Crop production can also impact international relationships by building allies and friendships with other countries.

Some developing countries produce agricultural crops and sell them on the world market. For some developing countries, the sale of agricultural products may be their primary source of income. Overproduction of crops may drive the crop price down. Lower prices may significantly reduce the income derived from exported crops. Overproduction may also push developing countries out of the market completely. Reduced export trade may be devastating to the economy of a developing country.

Because of limitations in soil quality or water resources, many countries are not able to produce enough food. Export trade may result in a dependency on food imports to feed the population of a developing country. Planning and management are needed to enable developing countries to improve their own agricultural production. Otherwise, developing countries will remain dependent on others for survival.

Effects of Foreign Crop Production on the U.S.

Before the colonies of North America became independent from Europe, agricultural products were traded with Europe and the Caribbean islands. The U.S. is the leading producer and exporter of agricultural products. However, other countries are increasing their food export capabilities. Competition from other countries in the world market is a major concern for agricultural producers in the U.S.

Some countries produce agricultural crops that are not grown in the U.S., such as tea, coffee, and certain fiber crops. Other countries produce crops similar to crops grown in the U.S. Consumer demand for these products keeps the market strong. However, when crop production in the U.S. and foreign countries is high, the supply may exceed the demand. Excessive production leads to large surpluses, which results in lower prices for commodities on the world market. Many foreign countries enjoy lower labor costs in producing and processing agricultural crops. Lower labor costs reduce the cost of production, which allows the products to be sold for a lower price. U.S. products must be priced accordingly to be competitive on the world market.

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Crop Production and Society Development

Countries that are able to produce crops efficiently tend to be more developed. Countries that are able to supply the food, shelter, and clothing needs of their people may be in a position to devote resources to pursue other endeavors. Because of the efficient crop production of American farmers, U.S. consumers spend less money on food. Therefore, most families have money available for other uses (e.g., education, housing, and leisure). Additional purchases of goods and services stimulate the need for jobs, which generates more employment. This circular process stimulates the economy of a community, state, or nation.

When crop production is efficient, many countries trade beyond their borders to attain resources. National and international trade creates more jobs and secures additional resources for economic expansion. Through international trade, developing countries can acquire and develop capital to aid in their advancement.

Summary

Because of the diversity of Missouri's land and resources, efficient production of crops is possible. Missouri ranks among the top 10 states in crop production in the U.S. Missouri also contributes to international trade by producing crops that are sold on the world market.

Credits

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