

Why Is Agriculture Important? Benefits and Its Role

When people think of agriculture, they often envision crop farming: soil and land preparation and sowing, fertilizing, irrigating, and harvesting different types of plants and vegetation.

However, according to the U.S. Census Bureau's North American Industry Classification System (NAICS), crop farming is just one element of the Agriculture, Forestry, Fishing, and Hunting sector. Agriculture also encompasses raising livestock; industrial forestry and fishing; and agricultural support services, such as agricultural equipment repair and trucking operations.

Why is agriculture important? It helps sustain life by providing the food we need to survive. It also contributes \$7 trillion to the U.S. economy. Despite agriculture's importance, the Economic Policy Institute reports that farmworkers are among the lowest-paid workers in the U.S.

However, agriculture also provides opportunities for economic equity and helps people prosper around the world. For example, since 2000, the agricultural growth rate in Sub-Saharan Africa has surpassed that of any other region in the world (approximately 4.3% annually), contributing to the region's economic gains, according to the United States Agency for International Development (USAID). While there's been a global decline in agricultural jobs — from 1 billion in 2000 to 883 million in 2019, according to employment indicators from the Food and Agriculture Organization of the United Nations — agriculture remains the second-highest source of employment (26.7% of total work).

What Is Agriculture?

Agriculture is the practice of cultivating natural resources to sustain human life and provide economic gain. It combines the creativity, imagination, and skill involved in planting crops and raising animals with modern production methods and new technologies.

Agriculture is also a business that provides the global economy with commodities: basic goods used in commerce, such as grain, livestock, dairy, fiber, and raw materials for fuel. For example, fiber is a top crop in U.S. agricultural production, according to The Balance Small Business, and a necessary commodity for the clothing sector.

Why Is Agriculture Important?

A key to why agriculture is important to business and society is its output — from producing raw materials to contributing to the global supply chain and economic development.



Providing Raw Materials

Raw materials are a core building block of the global economy. Without access to raw materials, manufacturers can't make products. Nonagricultural raw materials include steel, minerals, and coal. However, many raw materials derive from agriculture — from lumber for construction materials to herbs for adding flavor to food. Corn, for example, is used to produce foods and serves as a foundation for ethanol, a type of fuel. Another example is resins: plant products used in various industrial applications, such as adhesives, coatings, and paints used in construction.

Creating a Strong Supply Chain

Importing and exporting goods such as agricultural products requires shipping methods such as ocean freight, rail, and trucking. Delays in shipping agricultural products from a Los Angeles port can create problems in China, and vice versa, impacting the global supply chain.

For example, sales of soybean crops from Iowa skyrocketed in 2021 due to various factors including delays in South American crop shipments, according to the Iowa Soybean Association. In this example, Iowa benefited from a competitive standpoint. However, delays in shipping crops could also be detrimental to regions expecting shipment, limiting availability of products on store shelves and affecting livelihoods.

Encouraging Economic Development

Agriculture impacts global trade because it's tied to other sectors of the economy, supporting job creation and encouraging economic development. Countries with strong agricultural sectors experience employment growth in other sectors, according to USAID. Countries with agricultural productivity growth and robust agriculture infrastructure also have higher per capita incomes, since producers in these countries innovate through technology and farm management practices to boost agricultural productivity and profitability.

How Is Agriculture Important?

When global supply chains are disrupted, considerable attention is given to the technology sector. For example, the lack of computer chips — made from silicon, a nonagricultural raw material — limits a manufacturer's ability to make computers, cars, and other products. This impacts many areas of society and business.

Agriculture also plays a central role in meeting consumer and business market demand in a world with interconnected economies. Here are different types of products derived from agriculture.

Fruits and Vegetables

Fruits and vegetables are essential sources of fiber, proteins, and carbohydrates in human diets. Vitamins, such as A, C, and E, and minerals, such as magnesium, zinc, and phosphorus, are naturally occurring in many fruits and vegetables. In addition to health benefits, fruits and vegetables add flavors to the human palette.

Animal Feed

Some fruits and vegetables are grown to provide feed for animals, from poultry to livestock. The American Industry Feed Association reports that about 900 animal feed ingredients are approved

by law in the U.S. These include ingredients that come from agricultural production, including hay, straw, oils, sprouted grains, and legumes.

Natural Rubber Production

The number of vehicles in the world is more than 1.4 billion. Every single one runs on rubber tires. According to GEP, the top rubber-producing countries are Thailand, Indonesia, and Malaysia — collectively representing approximately 70% of global natural rubber production — and about 90% of suppliers are small-scale farmers.

Cotton for Clothing

From cotton to clothes, the journey starts with agricultural production. Cotton is grown, harvested, and then processed, spun, and woven into fabric before it becomes a piece of clothing. Cotton production encompasses an expansive global supply chain, and according to Forum for the Future, it's a leading commodity, making up approximately 31% of all textile fibers globally.

Biofuels

The U.S. Environmental Protection Agency (EPA) reports favorable economics of biofuels, produced from biomass sources including agricultural products such as corn, soybeans, sugarcane, and algae. The benefits include reduced greenhouse gas and pollutant emissions and the potential for increased incomes for farmers. However, biodiesel production requires the use of land and water resources that can affect food costs.

Industrial Products

Bio-based chemistry involves using raw materials derived from biomass to develop industrial products. Different industrial products derived from bio-based chemicals include bioplastics, plant oils, biolubricants, inks, dyes, detergents, and fertilizers. Bio-based chemicals and products offer an alternative to conventional products derived from petroleum products. Bio-based chemistry is considered a type of green chemistry because it promotes the reduction of environmental impacts in industrial production.

Pharmaceutical Products

For thousands of years, humans have turned to plants to help treat what ails them. For example, ginger, a plant root typically consumed in tea, can help aid digestion. Substances derived from plants and herbs can also help in healthcare. For example, extracted chemicals from the foxglove plant are used for digoxin, a drug used for heart failure. Another example is polylactic acid (PLA), a chemical produced when glucose is fermented into lactic acid in green plants. PLA has applications in tissue engineering, cardiovascular implants, orthopedic interventions, cancer therapy, and fabrication of surgical implants, according to a study published in Engineered Regeneration.



1. It's the main source of raw materials

Many raw materials, whether it's cotton, sugar, wood, or palm oil, come from agriculture. These materials are essential to major industries in ways many people aren't even aware of, such as the manufacturing of pharmaceuticals, diesel fuel, plastic, and more. In fact, raw materials are so important in production that the economic health of a country strongly depends on how many raw materials it possesses.

2. It's important to international trade

Raw materials from agriculture make up a huge portion of what's traded internationally. Countries with plenty of those supplies export them and trade for materials they don't have. If a country's agriculture suffers for some reason, prices can go up and it disrupts the flow of trade. Currently, the EU is the first trader of agricultural products in the world, both for imports and exports.

3. It plays a big role in a nation's revenue

Speaking of trade, developing countries still get most of their national income from agricultural exports. While developed countries don't depend on agriculture as much as they used to, their economies would definitely take a hit if all exports suddenly stopped.

4. It provides employment

The agricultural industry is still one of the biggest sources of employment and in many areas, it's actually booming. Whether it's working as a farmer, harvester, technician for farm equipment, scientist, and so on, there are plenty of jobs available in this field. In developing countries, agricultural jobs help reduce high rates of unemployment. When it comes to reducing poverty, evidence shows that focusing on agriculture is significantly more effective than investing in other areas.

5. It's crucial to a country's development

Economic development is tied to a country's agriculture sector. When trade, national revenue, and employment are combined in a positive way, a country enjoys reduced poverty and boosted economic growth. Because strong agriculture results in benefits fairly quickly, focusing on it is one of the best ways to speed up development and improve a country's standing in the world.

6. It can help heal the environment

Agriculture possesses the power to harm or heal. When farmers prioritize biodiversity on their land, it benefits the earth. Having more biodiversity results in healthier soil, less erosion, better water conservation, and healthier pollinators. This is all good news for the environment as a whole, making agriculture an important part of the cycle of life.

7. It goes hand-in-hand with war

Agriculture is such an important part of a country's infrastructure, it makes sense it would impact conflicts and war. Throughout history, the need for land to grow food fueled many conflicts. In more modern times, specifically WWI, America's farming industry boomed because they needed to supply Europe with agricultural products. For countries who don't have assistance, war can break down the agricultural sector, affecting people for decades to come. When discussing agriculture, it's impossible to not at least mention its connection to conflict.

8. It's the source of our food supply

Arguably the most important aspect of agriculture is that it's the source of the world's food supply. No matter where or what you are eating, the ingredients in your meals came from somewhere. All roads lead to agriculture. In countries dealing with food insecurity and severe malnourishment, it's because their agriculture sectors are suffering. When agriculture thrives, fewer people go hungry.

9. It drives innovation in technology

Because healthy agriculture is so essential to a country's well-being, it's been the setting of some of the most exciting innovations in technology. Through artificial intelligence, blockchain software, gene manipulation, and more, scientists and farmers have been figuring out ways to increase crop productivity, use less water, and reduce negative impacts on the environment. For scientists and tech companies, agribusiness is one of the most fascinating and productive fields to work in.



10. The state of agriculture reflects our future

When it comes to pollution and climate change, the environment and agriculture suffer the quickest and with the most clear consequences. If effective changes aren't made, climate change's impact on agriculture will decimate a country's economy and eventually wipe out the food supply. To get

a better idea about where humanity is going to end up, look at agriculture. What's being done to adapt to a rapidly-changing climate? What will our food supply look like? The state of agriculture is a good test of what we can expect the future to look like.

Importance of Agriculture in Everyday Life

For thousands of years, agriculture has played an important role in everyday life. Before agriculture, hunting and gathering enabled humans to survive. It wasn't until the transition to the planned sowing and harvesting of crops that humans began to thrive. Humans developed tools and practices to improve agricultural output with more efficient means of sustaining themselves. From there, innovations that created industries led to the modern era.

Today, the importance of agriculture in everyday life can't be minimized. Without the agriculture sector, activities such as getting dressed for work and cleaning the home wouldn't be possible. Here are examples of the agricultural products we use in our everyday lives:

Shelter. Wood and plant-based materials, such as bamboo, can be used for indoor décor and construction materials.

Morning routine. Mint is often an ingredient in toothpaste, adding flavor while brushing your teeth, and the caffeine in coffee that keeps you awake is derived from the coffee bean.

Dressing up. In addition to cotton, clothing can be manufactured from hemp, ramie, and flax. Bio-based materials can be used to produce grooming products such as skin creams and shampoos.

Cleaning. Two types of chemicals used in detergents, cleaning products, and bath or hand soap — surfactants and solvents — can be produced from biomass.

Driving to work. Plants make it possible to get to and from work. Think of rubber (sourced from rubber trees) and biodiesel fuel, which often includes ethanol (sourced from corn).

Entertainment. Paper from trees enables you to write, and some musical instruments, such as reed instruments, require materials made from plants.

Education. From pencils (still often made of wood) to paper textbooks, students rely on agricultural products every day.

How Does Agriculture Affect the Economy?

Agriculture can have a significant effect on the economy. The U.S. Department of Agriculture (USDA) Economic Research Service reports that agricultural and food sectors provided 10% of all U.S. employment in 2020 — nearly 20 million full- and part-time jobs. Additionally, the USDA reported that cash receipts from crops totaled nearly \$198 billion in 2020. Animal and animal product receipts weren't far behind in 2020, totaling \$165 billion.

The interdependence of the food and agriculture sector with other sectors, including water and wastewater systems, transportation systems, energy, and chemical, makes it a critical engine for economic activity, according to the Cybersecurity and Infrastructure Security Agency (CISA).

Why Is Agriculture Important for the Future?

Agriculture offers an opportunity to improve the lives of millions of food-insecure people and help countries develop economies that create jobs and raise incomes. Today's agriculture also impacts future generations. To ensure the long-term success of the global agricultural sector, building a more sustainable economic system aligned with the U.N.'s Sustainable Development Goals is a crucial imperative to help create a more equitable society.