**Colonial farming: 1610–1775**

Plantation agriculture, using slaves, developed in Virginia and Maryland (where tobacco was grown), and South Carolina (where indigo and rice were grown). Cotton became a major plantation crop after 1800 in the "Black Belt," that is the region from North Carolina in an arc through Texas where the climate allowed for cotton cultivation.

Most farms were subsistence, producing food for the family and some for trade and taxes.

The first settlers in Plymouth Colony planted barley and peas from England but their most important crop was Indian corn (maize) which they were shown how to cultivate by the native Squanto. To fertilize this crop, they used small fish which they called herrings or shads.

*Ethnic farming styles*

Ethnicity made a difference in agricultural practice. German Americans brought with them practices and traditions that were quite different from the English or Scots. They adapted Old World techniques to a much more abundant land supply. Furthermore, the Germans showed a long-term tendency to keep the farm in the family, and avoid having their children move to towns. For example, they generally preferred oxen rather than horses to pull their plows. The Scots-Irish built an economy with some farming but more herding (of hogs and cattle). In the American colonies, Scots-Irish focused on mixed-farming. Using this technique, they grew corn for human consumption and as feed for hogs and other livestock.

Many improvement-minded farmers of all different backgrounds began using new agricultural practices to raise their output. During the 1750s, these agricultural innovators replaced the hand sickles and scythes used to harvest hay, wheat, and barley with the cradle scythe, a tool with wooden fingers that arranged the stalks of grain for easy collection. This tool was able to triple the amount of work down by farmers in one day. A few scientific farmers (mostly wealthy planters like George Washington) began fertilizing their fields with dung and lime and rotating their crops to keep the soil fertile.

Before 1720, most colonists in the mid-Atlantic region worked with small-scale farming and paid for imported manufactures by supplying the West Indies with corn and flour. In New York, a fur-pelt export trade to Europe flourished adding additional wealth to the region. After 1720, mid-Atlantic farming stimulated with the international demand for wheat. A massive population explosion in Europe brought wheat prices up. By 1770, a bushel of wheat cost twice as much as it did in 1720. Farmers also expanded their production of flaxseed and corn since flax was a high demand in the Irish linen industry and a demand for corn existed in the West Indies.

Many poor German immigrants and Scots-Irish settlers began their careers as agricultural wage laborers. Merchants and artisans hired teen-aged indentured servants, paying the transportation over from Europe, as workers for a domestic system for the manufacture of cloth and other goods. Merchants often bought wool and flax from farmers and employed newly arrived immigrants, who had been textile workers in Ireland and Germany, to work in their homes spinning the materials into yarn and cloth. Large farmers and merchants became wealthy, while farmers with smaller farms and artisans only made enough for subsistence.

## New Nation: 1776-1860

The U.S. economy was primarily agricultural in the early 19th century. Westward expansion plus the building of canals and the introduction of steamboats opened up new areas for agriculture. Most farming was designed to produce food for the family, and service small local market. In times of rapid economic growth, a farmer could still improve the land for far more than he paid for it, and then move further west to repeat the process.

In the South, the poor lands were held by poor white farmers, who generally owned no slaves. The best lands were held by rich plantation owners, were operated primarily with slave labor. They grew their own food, and concentrated on a few crops that could be exported. But after a few years, the fertility of the soil was depleted and the plantation was moved to the new land further west. Much land was cleared and put into growing cotton in the Mississippi valley and in Alabama, and new grain growing areas were brought into production in the Mid West. Eventually this put severe downward pressure on prices, particularly of cotton, first from 1820–23 and again from 1840-43. Sugar cane was being grown in Louisiana, where it was refined into granular sugar. Growing and refining sugar required a large amount of capital. Some of the nation's wealthiest men owned sugar plantations, which often had their own sugar mills.
In New England, subsistence agriculture gave way after 1810 to production to provide food supplies for the rapidly growing industrial towns and cities.

## South, 1860–1940

Agriculture and the South was oriented toward large scale plantations that produced cotton for export, as well as other export product such as tobacco and sugar. During the Civil War, the Union blockade shut down 95 percent of the export business. Some cotton got out through blockade runners, and in conquered areas much was bought by Northern speculators for shipment to Europe. The great majority white farmers work on small subsistence farms that Supply the needs of the family and the small local market. After the war, the world price of cotton plunged, the plantations were broken into small farms for the Freedmen, and poor whites started growing cotton because they needed the money to pay taxes.

Sharecropping became widespread in the South as a response to economic upheaval caused by the end of slavery during and after Reconstruction. Sharecropping was a way for very poor farmers, both white and black, to earn a living from land owned by someone else. The landowner provided land, housing, tools and seed, and perhaps a mule, and a local merchant provided food and supplies on credit. At harvest time the sharecropper received a share of the crop (from one-third to one-half, with the landowner taking the rest). The cropper used his share to pay off his debt to the merchant. The system started with blacks when large plantations were subdivided. By the 1880s white farmers also became sharecroppers. The system was distinct from that of the tenant farmer, who rented the land, provided his own tools and mule, and received half the crop. Landowners provided more supervision to sharecroppers, and less or none to tenant farmers. Poverty was inevitable because world cotton prices were low.

Southern farmers made the mule their preferred draft animal in the South during the 1860s-1920s, primarily because it fit better with the region's geography. Mules better withstood the heat of summer, and their smaller size and hooves were well suited for such crops as cotton, tobacco, and sugar. The character of soils and climate in the lower South hindered the creation of pastures, so the mule breeding industry was concentrated in the border states of Missouri, Kentucky, and Tennessee. Transportation costs combined with topography to influence the prices of mules and horses, which in turn affected patterns of mule use. The economic and production advantages associated with mules made their use a progressive step for Southern agriculture that endured until the mechanization brought by tractors.

**Railroad Age: 1860–1910**

A dramatic expansion in farming took place. The number of farms tripled from 2.0 million in 1860 to 6.0 million in 1905. The number of people living on farms grew from about 10 million in 1860 to 22 million in 1880 to 31 million in 1905. The value of farms soared from $8.0 billion in 1860 to $30 billion in 1906.

The federal government issued 160-acre tracts virtually free to about 400,000 families who settled new land under the Homestead Act of 1862. Even larger numbers purchased lands at very low interest from the new railroads, which were trying to create markets. The railroads advertised heavily in Europe and brought over, at low fares, hundreds of thousands of farmers from Germany, Scandinavia and Britain.

*Rural life*

Early settlers discovered that the Great Plains was not the "Great American Desert," but they also found that the very harsh climate—with tornadoes, blizzards, drought, hail, floods and grasshoppers—made for a high risk of a ruined crop. Many early settlers were financially ruined, especially in the early 1890s, and either protested through the Populist movement, or went back east. In the 20th century, crop insurance, new conservation techniques, and large-scale federal aid all lowered the risk. Immigrants and their children comprised the largest element of settlers after 1860; they were attracted by the good soil, low priced lands from the railroad companies, and the chance to homestead 160 acres and receive title to the land at no cost from the federal government.

The problem of blowing dust came not because farmers grew too much wheat, but because the rainfall was too little to grow enough wheat to keep the topsoil from blowing away. In the 1930s techniques and technologies of soil conservation, most of which had been available but ignored before the Dust Bowl conditions began, were promoted by the Soil Conservation Service (SCS) of the US Department of Agriculture, so that, with cooperation from the weather, soil condition was much improved by 1940.

On the Great Plains very few single men attempted to operate a farm or ranch; farmers clearly understood the need for a hard-working wife, and numerous children, to handle the many chores, including child-rearing, feeding and clothing the family, managing the housework, feeding the hired hands, and, especially after the 1930s, handling the paperwork and financial details. During the early years of settlement in the late 19th century, farm women played an integral role in assuring family survival by working outdoors. After a generation or so, women increasingly left the fields, thus redefining their roles within the family. New conveniences such as sewing and washing machines encouraged women to turn to domestic roles. The scientific housekeeping movement, promoted across the land by the media and government extension agents, as well as county fairs which featured achievements in home cookery and canning, advice columns for women in the farm papers, and home economics courses in the schools.

*Ranching*

Much of the Great Plains became open range, hosting cattle ranching operations on public land without charge. In the spring and fall, ranchers held roundups where their cowboys branded new calves, treated animals and sorted the cattle for sale. Such ranching began in Texas and gradually moved northward. Cowboys drove Texas cattle north to railroad lines in the cities of Dodge City, Kansas and Ogallala, Nebraska; from there, cattle were shipped eastward. British investors financed many great ranches of the era. Overstocking of the range and the terrible winter of 1886 resulted in a disaster, with many cattle starved and frozen to death. From then on, ranchers generally raised feed to ensure they could keep their cattle alive over winter.

When there was too little rain for ordinary farming, but enough grass for grazing, cattle ranching became dominant. Before the railroads arrived in Texas the 1870s cattle drives took large herds from Texas to the railheads in Kansas. A few thousand Indians resisted, notably the Sioux, who were reluctant to settle on reservations, but most Indians themselves became ranch hands and cowboys. New varieties of wheat flourished in the arid parts of the Great Plains, opening much of the Dakotas, Montana, western Kansas, western Nebraska and eastern Colorado to farming.

## Grange

The Grange was an organization founded in 1867 for farmers and their wives that was strongest in the Northeast, and which promoted the modernization not only of farming practices but also of family and community life. It is still in operation.

Membership soared from 1873 (200,000) to 1875 (858,050) as many of the state and local granges adopted non-partisan political resolutions, especially regarding the regulation of railroad transportation costs. The organization was unusual in that it allowed women and teens as equal members. Rapid growth infused the national organization with money from dues, and many local granges established consumer cooperatives, initially supplied by the Chicago wholesaler Aaron Montgomery Ward. Poor fiscal management, combined with organizational difficulties resulting from rapid growth, led to a massive decline in membership. By around the start of the 20th century, the Grange rebounded and membership stabilized.

In the mid-1870s, state Granges in the Midwest were successful in passing state laws that regulated the rates they could be charged by railroads and grain warehouses. The birth of the federal government's Cooperative Extension Service, Rural Free Delivery, and the Farm Credit System were largely due to Grange lobbying. The peak of their political power was marked by their success in *Munn v. Illinois*, which held that the grain warehouses were a "private utility in the public interest," and therefore could be regulated by public law (see references below, "The Granger Movement"). During the Progressive Era (1890s-1920s), political parties took up Grange causes. Consequently, local Granges focused more on community service, although the State and National Granges remain a political force.

## 1945 until present

After 1945, a continued annual 2% increase in productivity (as opposed to 1% from 1835-1935) led to further increases in farm size, and corresponding reductions in the number of farms. Many farmers sold out and moved to nearby towns and cities. Others moved to a part-time operation, supported by off-farm employment.

New machinery—especially large self-propelled combines and mechanical cotton pickers—sharply reduced labor requirements in harvesting.

Second, electricity powered motors and irrigation pumps that opened up new ways to be efficient. Electricity also played a role making possible major innovations in animal husbandry, especially modern milking parlors, grain elevators, and CAFOs (confined animal-feeding operations). Advances in fertilizers and herbicides, as well as insecticides and fungicides, antibiotic use in livestock and growth hormones, reduced wastage due to weeds, insects and diseases.

There have been big advances in plant breeding and animal breeding, such as crop hybridization, GMOs (genetically modified organisms) and artificial insemination of livestock. Further down the food change came innovations in food processing and food distribution (e.g. frozen foods).

In 2015, grain farmers were taking "an extreme step, one not widely seen since the 1980s" by breaching lease contracts with their landowners, reducing how much land they would sow and risking years-long legal battles with landlords.

## World War I

The U.S. in World War I, was a critical supplier to other Allied nations, as millions of European farmers were in the army. The rapid expansion of the farms coupled with the diffusion of trucks and Model T cars, and the tractor, allowed the agricultural market to expand to an unprecedented size.

During World War I prices shot up and farmers borrowed heavily to buy out their neighbors and expand their holdings. This gave them very high debts that made them vulnerable to the downturn in farm prices in 1920. Throughout the 1920s and down to 1934 low prices and high debt were major problems for farmers in all regions.

## 1920s

A popular Tin Pan Alley song of 1919 asked, concerning the United States troops returning from World War I, "How Ya Gonna Keep 'Em Down On the Farm After They've Seen Paree?". In fact, many did not remain "down on the farm"; there was a great migration of youth from farms to nearby towns and smaller cities. The average distance moved was only 10 miles. Few went to the cities over 100,000. However, agriculture became increasingly mechanized with widespread use of the tractor, other heavy equipment, and superior techniques disseminated through County Agents, who were employed by state agricultural colleges and funded by the Federal government. The early 1920s saw a rapid expansion in the American agricultural economy largely due to new technologies and especially mechanization. Competition from Europe and Russia had disappeared due to the war and American agricultural goods were being shipped around the world.

The new technologies, such as the combine harvester, meant that the most efficient farms were larger in size and, gradually, the small family farm that had long been the model were replaced by larger and more business-oriented firms. Despite this increase in farm size and capital intensity, the great majority of agricultural production continued to be undertaken by family-owned enterprises.

World War I had created an atmosphere of high prices for agricultural products as European nations demand for exports surged. Farmers had enjoyed a period of prosperity as U.S. farm production expanded rapidly to fill the gap left as European belligerents found themselves unable to produce enough food. When the war ended, supply increased rapidly as Europe's agricultural market rebounded. Overproduction led to plummeting prices which led to stagnant market conditions and living standards for farmers in the 1920s. Worse, hundreds of thousands of farmers had taken out mortgages and loans to buy out their neighbors' property, and now are unable to meet the financial burden. The cause was the collapse of land prices after the wartime bubble when farmers used high prices to buy up neighboring farms at high prices, saddling them with heavy debts. Farmers, however, blamed the decline of foreign markets, and the effects of the protective tariff.

Farmers demanded relief as the agricultural depression grew steadily worse in the middle 1920s, while the rest of the economy flourished. Farmers had a powerful voice in Congress, and demanded federal subsidies, most notably the McNary–Haugen Farm Relief Bill. It was passed but vetoed by President Coolidge. Coolidge instead supported the alternative program of Commerce Secretary Herbert Hoover and Agriculture Secretary William M. Jardine to modernize farming, by bringing in more electricity, more efficient equipment, better seeds and breeds, more rural education, and better business practices. Hoover advocated the creation of a Federal Farm Board which was dedicated to restriction of crop production to domestic demand, behind a tariff wall, and maintained that the farmer's ailments were due to defective distribution. In 1929, the Hoover plan was adopted.

**New Deal farm and rural programs 1933-1940**

President Franklin D. Roosevelt was keenly interested in farm issues and believed that true prosperity would not return until farming was prosperous. Many different New Deal programs were directed at farmers. Farming reached its low point in 1932, but even then millions of unemployed people were returning to the family farm having given up hope for a job in the cities. The main New Deal strategy was to reduce the supply of commodities, thereby raising the prices a little to the consumer, and a great deal to the farmer. Marginal farmers produce too little to be helped by the strategy; specialized relief programs were developed for them. Prosperity largely returned to the farm by 1936.

Roosevelt's "First Hundred Days" produced the Farm Security Act to raise farm incomes by raising the prices farmers received, which was achieved by reducing total farm output. In May 1933 the Agricultural Adjustment Act created the Agricultural Adjustment Administration (AAA). The act reflected the demands of leaders of major farm organizations, especially the Farm Bureau, and reflected debates among Roosevelt's farm advisers.

The aim of the AAA was to raise prices for commodities through artificial scarcity. The AAA used a system of "domestic allotments", setting total output of corn, cotton, dairy products, hogs, rice, tobacco, and wheat. The farmers themselves had a voice in the process of using government to benefit their incomes. The AAA paid land owners subsidies for leaving some of their land idle with funds provided by a new tax on food processing. The goal was to force up farm prices to the point of "parity", an index based on 1910–1914 prices. To meet 1933 goals, 10 million acres (40,000 $km^2$) of growing cotton was plowed up, bountiful crops were left to rot, and six million piglets were killed and discarded. The idea was the less produced, the higher the wholesale price and the higher income to the farmer. Farm incomes increased significantly in the first three years of the New Deal, as prices for commodities rose. Food prices remained well below 1929 levels.

The AAA established a long-lasting federal role in the planning of the entire agricultural sector of the economy, and was the first program on such a scale on behalf of the troubled agricultural economy. The original AAA did not provide for any sharecroppers or tenants or farm laborers who might become unemployed, but there were other New Deal programs especially for them, such as the Farm Security Administration.

In 1936, the Supreme Court declared the AAA to be unconstitutional for technical reasons; it was replaced by a similar program that did win Court approval. Instead of paying farmers for letting fields lie barren, the new program instead subsidized them for planting soil enriching crops such as alfalfa that would not be sold on the market. Federal regulation of agricultural production has been modified many times since then, but together with large subsidies the basic philosophy of subsidizing farmers is still in effect in 2015.

Many rural people lived in severe poverty, especially in the South. Major programs addressed to their needs included the Resettlement Administration (RA), the Rural Electrification Administration (REA), rural welfare projects sponsored by the WPA, NYA, Forest Service and CCC, including school lunches, building new schools, opening roads in remote areas, reforestation, and purchase of marginal lands to enlarge national forests. In 1933, the Administration launched theTennessee Valley Authority, a project involving dam construction planning on an unprecedented scale in order to curb flooding, generate electricity, and modernize the very poor farms in the Tennessee Valley region of the Southern United States.

For the first time, there was a national program to help migrant and marginal farmers, through programs such as the Resettlement Administration and the Farm Security Administration. Their plight gained national attention through the 1939 novel and film *The Grapes of Wrath*. The New Deal thought there were too many farmers, and resisted demands of the poor for loans to buy farms. However, it made a major effort to upgrade the health facilities available to a sickly population.

Agriculture was very prosperous during World War II, even as rationing and price controls limited the availability of meat and other foods in order to guarantee its availability to the American and Allied armed forces. During World War II, farmers were not drafted, but surplus labor, especially in the southern cotton fields, voluntarily relocated to war jobs in the cities.