

The Agricultural Revolution

The Agricultural Revolution occurred between 1750 and 1900 when the way in which farmers produced food in this country changed. In 1750 most people lived and worked in villages producing food. As the country went through the Industrial Revolution though it was necessary to increase the amount of food grown. This was because the population was increasing quite rapidly.

In the early part of the eighteenth century most farmers had strips of land that they would grow their food on. This system had many disadvantages. Banks of earth separating the strips were wasted land, drainage was poor and because the farmers knew little about fertilisers they had to leave land fallow (unused) every four years.

It can be argued that there was no Agricultural Revolution as the changes in farming were gradual. By the early nineteenth century farmers were beginning to use the

Norfolk Crop Rotation System. This system meant that no land had to remain fallow. The system worked like this:

Each area of land would be split into four sections. The crop that was grown on each field would be rotated so that different nutrients would be taken from the land.

In the **first year** turnips or another root crop would be grown;

In the **second year** barley was grown in the field (barley could be sold at a profit);

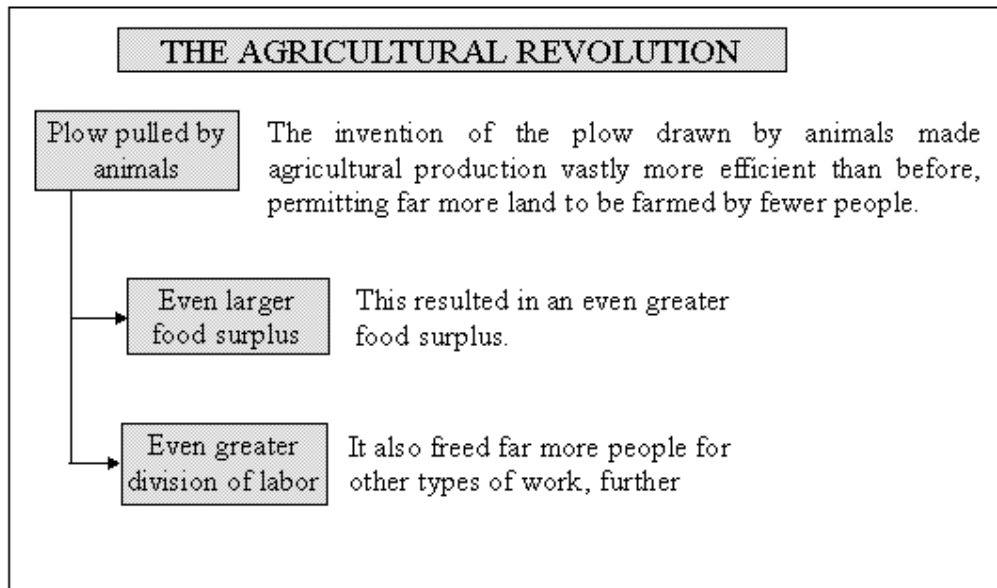
In the **third year** clover or a grass crop was grown and in the fourth year wheat was grown in the field (wheat could also be sold for a profit).

As the demand for food increased people began to make improvements to the types of machines used on farms. A seed drill and threshing machine being amongst the first new inventions to help farmers. Inventions such as these, along with the enclosure of fields, helped agriculture to develop rapidly and produce enough food for the growing population.

The agricultural revolution produced a transformation of human society brought about by the invention of the plough, making large-scale agricultural production possible and leading to agrarian societies.

The agricultural revolution had such a profound impact on society that many people call this era the "dawn of civilization." During this same period that the plow was invented, the wheel, writing, and numbers were also invented.

The agricultural revolution further accentuated the changes taking place due to the domestication revolution, extending those effects even farther in society.



During this period, stratification became a major feature of social life. An elite gained control of surplus resources and defended their position with arms. This centralization of power and resources eventually led to the development of the state as the rich and powerful developed the institution of the state to further consolidate their gains.

New farming ideas

After 1750, **new farming ideas and techniques** began to reach Britain from abroad. Most of these ideas came from Holland and Denmark. At first, the ideas were not popular, but they soon started to spread across Britain because the farmers using them were making good profits.

Changes in farming techniques during this period were connected with:

- A more **scientific approach** used for crop rotation.
- **Soil improvement** that allowed better quality crops to be grown.
- New **stock breeding techniques** to produce bigger cattle and better meat.
- The use of **new machinery** in fields.

Agricultural improvers played an important role in changing and improving British farming techniques. Improvers were divided into three categories:

1. **Agricultural improvers** - people who worked to improve the land.
2. **Selective breeders** - people who worked to improve the quality of cattle.
3. **Propagandists** - people who worked to spread new ideas about farming techniques.

The Agricultural Improvers

Charles 'Turnip' Townshend

He popularised new techniques and proved that they were more profitable. He:

- Introduced the **Norfolk Four-Course crop rotation** (wheat, turnips, barley, clover) to Britain. Turnips were used as a cleansing crop to allow the land to be hoed to kill the weeds, and clover was grown to replace the nutrients in the soil that the crops had depleted. This rotation prevented land from lying **fallow** and both turnips and clover were fodder crops, which could be fed to animals to allow more of them to survive cold winters.
- Used a method called **marling**, which mixed rich subsoil with a poorer sandy soil to produce better quality crops and increasingly more profit.
- Gave his tenant farmers **longer leases** to encourage them to invest more money to experiment with new ideas and improving their land.

Jethro Tull

He is important because he introduced ideas that others went on to develop.

- In 1701, he invented a **horse-powered seed drill** that planted seeds at the same depth in straight lines. This wasted less seeds and allowed farmers to manage their crops more easily.
- In 1714, he invented a **horse-drawn hoe** that made it easier for farmers to weed between their seed rows.

In 1731, he wrote a book called "**Horse Hoeing Husbandry**", which promoted new farming ideas.

The Selective Breeders

Robert Bakewell

He was a pioneering selective breeder. His new methods were simple:

- He only chose the **best farm animals** and bred from them. His most successful animals were the **New Leicester Sheep and the Dishley Longhorn cattle**. They were bigger animals, but they did not have better meat.
- Bakewell kept **detailed records** about his livestock, made sure they were very healthy and their stables and pens were always clean.
- He was so successful that other farmers often hired his animals to breed from.

Bakewell also wrote **articles and pamphlets** describing his new breeding techniques and their advantages.

The Colling brothers

They were also selective breeders, but not as well known as Robert Bakewell.

They improved on Robert Bakewell's methods and their main success was breeding the Durham Shorthorn cattle, which were able to produce large amounts of milk and high quality lean meat for sale at market.

The Propagandists

Arthur Young

He was a propagandist for agricultural improvement who was convinced that Britain needed a strong agricultural community.

- Young traveled around the country and some parts of Europe, writing **articles about agricultural change** and also edited an agricultural journal called "The Annals of Agriculture".
- In 1793, he became **secretary of the new Board of Agriculture** and encouraged the spread of new agricultural techniques and ideas.

Thomas Coke

He was a Norfolk landowner who adopted and spread new agricultural methods on his farm in Norfolk.

- He gave his tenant farmers **leases of 20 to 40 years** to encourage them to try out new methods. He believed that if his tenant farmers felt they owned the land for a significant period of time, they would be more willing to invest in it.
- Coke encouraged farmers to use the new techniques by **organising annual events** on his estate that demonstrated the newest methods. One such event was called Coke's Clipping. This was a competition to see how quickly a sheep could be sheared.

He was important for sharing and spreading new farming ideas.