# The Agricultural Revolution

**Why did it happen?**

Unlike many revolutions the Agricultural Revolution worked as an incremental change, one thing happened, which then led to the next and the next. It began in the 1700's with the first enclosure laws and scientists experimenting with new farming methods. Then better breeding techniques were developed, creating bigger and better livestock realising lasting economic benefits.

Better farming methods came into action like crop rotation, and then machines, first horse drawn and then with the help of the Industrial Revolution, steam powered. Because of the Industrial Revolution people started moving from the country to the towns and here there was better personal hygiene and new medicines were discovered, bringing around a population increase. Because of fertilisers and better techniques prices dropped and food became easier to obtain, economic growth had begun. For 100's of years economic development had stood still, the modern growth era had begun.

Before the 1700's there were few changes in farming but after 1700 people started to make changes to farming, with new scientific investigations, better plants were grown and animals bred. These main factors brought about the Agricultural Revolution and brought about a significant increase in wealth.

Before the revolution there was one main farming technique and that was strip farming.

This kind of farming was when the land was divided into strips and each peasant had a strip of land to farm. This was not productive so land was fenced off, in 1495-1603 the first enclosure law was passed for sheep. A new law passed between 1750-1831 declared that land was to be farmed in large fields and fenced off. After the strips had been fenced off, crop rotation was used, this is when the crops on fields are changed each year, this provided food for cattle as well as stopping the need for a fallow year (when the land was left unused for a year to regain its nutrients). This was because certain crops planted put important elements back into the soil.

Crop rotation worked in this way; wheat, root crop, barley, clover. The wheat was used for making bread and feeding people, the root crop was mainly turnips, which would mainly been used for cattle feed, then barley which would have been used for cattle feed as well as for humans, and then clover was planted, the main crop for replacing vital elements in the soil. During the agricultural revolution three million hectares of land was enclosed and farmed with crop rotation.

The Agricultural Revolution experienced a number of new inventions and animal breeds. In 1799 Joseph Boyce invented the reaper and in 1701 Jethro Tull invented the horse drawn drill. This invention changed farming for the better, instead of ploughing the land and then just scattering the seeds it ploughed the seeds into the land and covered them. By 1790 the first threshing machines were developed first powered by horse and then by steam. New fertilisers were used like guano, lime gypsum, sandy clay and marl. In 1793 the agricultural society was established and in 1741-1820 Arthur Young informed Europe and America of England's new discoveries. In 1710 the average weight of cattle was 144Kg but by 1795 it had nearly trebled to 360Kg. Wealthy landowners like Thomas

Coke, Earl of Leicester, encouraged experimental breeding of sheep and cattle, to produce new, improved, more profitable strains. Every year Coke held a grand assembly at Holkham Hall, his country house. Guests came from all over Europe to discuss new farming ideas.

This following quote outlines the main changes of English farming;

... to give a review of the husbandry which makes this country so famous. Great improvements have been made by means of the following: First: by enclosing without the assistance of Parliament. Second: by the use of marl (powered rock and lime) the clay. Third: rotation of crops: i) turnips; ii) barley; iii) clover; iv) wheat. Fourth: by the culture of turnips well hand-hoed. Fifth: by the culture of clover and ray-grass. Sixth: by the landlords granting long leases. Seventh: by the country being divided into large farms.

From The Farmer's Tour, Arthur Young, 1771

In the 1700's there was only a small population in England mainly in the south west and east Anglia but by 1901 the population was spread over the entire country, including Scotland and Wales with most areas with over 520 people per square mile. Between 1801 and 1851 the urban population had doubled and by 1901 it had almost doubled again because of the increasing birth-rate and migration from the country to the towns. The population also increased because between 1870 and 1914 the male and female death rates rapidly dropped. Families became smaller and from 1900 child death rates dropped too.

Because of the population increase and dropping prices in farming food prices dropped and farmers became more wealthy and prosperous. There was less competition from abroad and because of a higher population more food was needed. Colonies made plantations in Africa, Asia, Pacific and the Caribbean and soon the first cash crops were made like coffee, tea, bananas and rubber.

**Who lost out?**

There were few people who lost out in the Agricultural revolution but when the fields were changed from strips to fields (enclosures) the peasants lost their land and often their jobs. They often revolted in small numbers but there was never a full scale battle between the authorities and the peasants. The peasant farmers also lost out when the machines like the tractor were invented and there was less need for human labour and so many peasants were made redundant.

**Who Gained?**

Many of the rich landlords were the main people to gain. They had large areas of land which before were unproductive and did not make them very much money, but when the new farming methods and fertilisers were introduced the land became more productive and the profits rose which made them happy and they could then afford to experiment in breeding bigger, better animals as well as developing new farming techniques.